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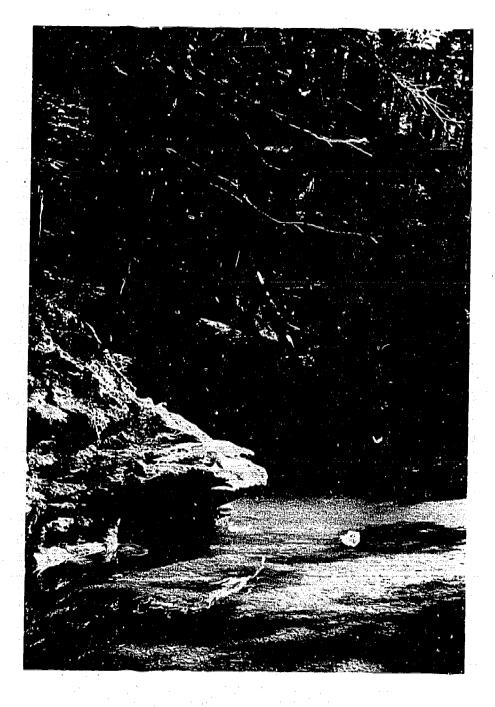
Ohio

AESTRACT

More than 700 areas in Ohio, useful as sites for environmental and outdoor studies, are catalogued in this guide. They include national forests; state parks; forest and wildlife areas; historic sites and memorials; metropolitan, country, and city parks; agency and private camps; conservation agency properties; conservancy district lands and reservoirs; school land laboratories; private conservation farms and campgrounds; and nature preserves. For a general overview of the state, four maps in the introduction show physiographic sections, geology, glacial deposits, and original natural vegetation. The major section of the guide compiles the areas in alphabetical order by counties. Each entry provides a short description of the bio-physical features of the area or site together with its official name, location, size, and source to contact for additional information. A separate chapter is devoted to nature preserves, "living museum" type areas, often outstanding remnants of woodlands, swamps, prairies, glacial relic vegatation, and/or geologic phenomena. A concluding index identifies each area by type (natural environment, school camping, conservation education, or undeveloped) and specified their facilities for public use. Notes on how to use the guide are included. (BL)

S DEPARTMENT OF HEALTH EDUCATION & WELFARE OFFICE OF EDUCATION DUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIG INATING IT POINTS OF VIEW OR OPIN IONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDU CATION POSITION OF POLICY

A GUIDE TO OHIO OUTDOOR EDUCATION AREAS



THE OHIO DEPARTMENT OF NATURAL RESOURCES THE OHIO ACADEMY OF SCIENCE

A GUIDE TO OHIO OUTDOOR EDUCATION AREAS

- INCLUDING -

State Parks, Forests and Wildlife Areas, Historic Sites and Memorials, Wayne National Forest, Metropolitan, County, and City Parks, Agency and Private Camps, Conservation Agency Properties, Conservancy District Lands and Reservoirs, School Land Laboratories, Private Conservation Farms and Campgrounds, and Nature Preserves.

Prepared by Ruth W. Melvin

for

THE STATE OF OHIO DEPARTMENT OF NATURAL RESOURCES

and

THE OHIO ACADEMY OF SCIENCE





DEPARTMENT OF NATURAL RESOURCES

OHIO DEPARTMENTS BUILDING COLUMBUS 43215

August 18, 1970

Dear Outdoor Educator:

Publication of this Guide represents a milestone in outdoor education in Ohio. It is my belief that only through increased exposure to the outdoor world can we better understand our environment and the imperative need to preserve and restore its quality.

Ever-expanding urbanization precludes outdoor experiences for an increasing number of children today. This Guide can be an important motivating factor in encouraging teachers and others interested in outdoor education to expand their horizons into the out-of-doors for firsthand experiences with the world in which we live.

We in the Department of Natural Resources commend the Ohio Academy of Science for cooperative thoroughness and quality of this work.

We are sure the Guide will fill a great need and provide a valuable tool for more effective environmental education.

Sincerely,

FRED E. MORR

Fred E. Mour

Director

FEM/jd

FOREWORD BY DR. PAUL B. SEARS

Emeritus Professor of Conservation, Yale University Past President, The Ohio Academy of Science Formerly Member, Wildlife Council—Ohio Department of Natural Resources

When my great-grandparents, like those of many native Ohioans, entered this beautiful and bounteous state, they came into a land of great forests. This land was rolling, but level enough so that for the first time, perhaps in history, it was possible to divide it into mile square sections by roads running north-south and east-west. Their chief problem was to remove enough of the giant trees to grow food and fiber for themselves and their livestock. The forest (and in places the prairie) was in a sense their rival for space as well as a source of building material. Since it seemed unlimited, they gave little thought to the fact—if they knew about it-that in older lands such as Switzerland, France, Denmark, and Germany people had found it necessary to restore the forests to provide needed timber and protect the water supply. One of their first concerns, after making a living, was to establish schools and later colleges. Because there was, for a long time, plenty to see and do out-of-doors and books and teachers were scarce, teaching and learning went on indoors. As high school and colleges sprang up this continued to be true; life was studied from books and in laboratories through the microscope. It is true that for many years students were encouraged to collect plants and identify them; meanwhile, their knowledge of animals came largely from hunting, fishing, farm livestock and pets. The main emphasis was on the three R's. their higher branches, and laboratory science.

Geologists of course were obliged to take their students on field trips. Some zoologists like Edward L. Rice of Ohio Wesleyan encouraged bird-study, others like the late Lynds Jones of Oberlin actually taught ecology, still gratefully recalled by alumni. Another notable example was the modest and learned naturalist Edwin Moseley who taught for years in the Sandusky High School and later at Bowling Green State University. All of nature was his province. But these men had to take what they found in the field. The possibility of setting aside nature preserves and outdoor laboratories seemed remote. A notable exception was the establishment of the Lake Laboratory or "Bug House" at Cedar Point by a consortium of colleges. This facility, since removed to Gibraltar Island, has paid rich dividends to science and its teaching.

Only in recent decades, as urban expansion, highway development, and industrial operations have threatened to destroy all traces of natural communities within the state. has it become possible to set aside remnants of them for teaching and research. It is a pleasure to learn that there is now a total of at least 780 of these. About 100 are 'winterized' and many can be used for extended visits by classes. The majority of these are available and heavily used for instruction, but some are set aside as preserves to be used in research. Credit for this great service to the public must be widely shared among many individuals and organizations, including Ohio's nature writers, professional scientists like the late Charles Dambach, lay naturalists, the Audubon Society and The Nature Conservancy, Many of these benefactors will be identified in the text which follows. A notable example with which, in spite of my long absences from Ohio, I am familiar, is the Audubon Nature Center near Dayton, made possible by the generosity of Mrs. Marie Aull. A feature of this heavily used center is a reconstructed prairie of tall grasses and other plants that once flourished in enclaves in Ohio. Another is the well-known Glen Helen at Antioch College in Yellow Springs. Nor should the Forestry Camps and similar establishments where high school students and teachers are sent by contributions from garden clubs and other sources by overlooked.

Let no one think that these are merely "nice things" or even luxuries in a busy and preoccupied world, to be sacrificed to growing land hunger when the time comes. For in the self-regulating organization of natural communities that have maintained themselves through the ages, enriching the soil, regulating the flow of water, purifying the air, and stablizing the land surface, we have a model for the use of energy and materials which our technical civilization, with its exploitation, waste, and pollution has violated to a point where it threatens the quality of human life, if not its survival.

To establish them has been a difficult task. To preserve and maintain them may be even more difficult, as a conversation with those in charge of some of them will quickly prove. Constant vigilance is required to prevent invasion, damage, or even take-over for projects such as sewer lines, highways, and other developments which can be made to sound more important in this crowded world. The citizens of Ohio should stand ready to prevent this kind of mischief and lend their steady support to those who have rendered them an invaluable service.



III

PREFACE

Outdoor education has become an imperative for the present and future preservation and quality of life on earth. The need to understand and appreciate natural environment is the challenge of education as well as governmental, industrial, and private organizations. This can best be achieved, it is generally agreed, by going into the outdoors, learning the relationships of physical environment to plant life and to animal life including man. Only by association and knowledge can a generation of appreciative, concerned citizens perpetuate the small remnants of remaining natural areas and provide an environmental quality which makes life fit for living.

A Guide to Ohio Outdoor Education Areas is a "natural succession" project resulting from a long time emphasis on conservation education in The Ohio Academy of Science. It was conceived as a means of helping teachers and youth group leaders find sites for field trips, school camping, and training in outdoor education. Long before the present environmental crisis, the conviction that children and youth should have more opportunities to encounter and study the natural environment in order to conserve it was foremost in the minds of the members of the Conservation Section of the Academy.

In 1965 Director Fred E. Morr and his staff saw the need for providing a broader spectrum of educational opportunities on lands administered by the Department of Natural

Resources and envisioned a descriptive guide as a necessary adjunct.

In January, 1968, the Edwin H. and Nellie M. Rausenberger Foundation for Conservation, provided a modest grant to finance the early research necessary to find areas suitable for outdoor education. Approximately one thousand questionnaires were sent to public and private agencies and individual land owners. Most replies were prompt and enthusiastic. It seemed that people in Ohio were aware of the need for a comprehensive outdoor education program. Additional information was obtained by visits from foresters, soil conservation unit managers, and Academy members in the counties. The study sought to glean environmental information concerning geology, flora, fauna, and history. An effort was made to procure for listing several types of areas in each county to guarantee diversity and progression. The wise use of land and natural resources was recognized as a part of outdoor education and permission to study these kinds of sites was obtained.

Since the turn of the century The Ohio Academy of Science has sponsored many activities in conservation education and the conservation of natural resources. Studies in game laws, proper utilization of water resources, the preservation and utilization of wild-life, the formation of state parks, topographic mapping of the entire state, reforestation, and strip mine reclamation provided information leading to resolutions, laws, and reports to state departments.

In 1942, Paul B. Sears, now professor emeritus of Yale University and a nationally recognized crusader in the field, published a succinct review of the history of conservation in Ohio. He later became chairman of the Conservation Committee of the Academy, and as

president gave an address entitled Conservation in Theory and Practice.

Under the leadership of Dr. Sears, and many other scientifically concerned people, the Conservation Section has become one of the most active in the Academy. At the annual meeting for 1951, just prior to its organization as a section, the committee recommended the promotion of conservation education in the public schools, as well as encouragement for a wider use of field study in the school program. The present study will hopefully serve as a tool to implement this early recommendation.

The Department of Natural Resources, working through its divisions, has actively engaged in procuring lands and establishing programs and procedures for conservation and wise use of natural resources. In a highly developed agricultural and industrial state the amount of land procured for forests, parks, and wildlife is amazing, and the program continues to expand. The publication of this Guide is an effort to promote knowledge about these lands, as well as others, in order to have future generations interested in their continued preservation. Through this cooperative project, The Ohio Academy of Science and

the Ohio Department of Natural Resources hope to maintain a beautiful Ohio.

In addition to the Rausenberger Foundation, the Ohio Department of Natural Resources, and the Conservation Section of the Academy, tremendous credit for this study goes to the advisory committee members: Irving Dickman, recently retired Chief, Division of Forestry and Reclamation, Ohio Department of Natural Resources, chairman; Robert R. Finlay, Education Consultant in Conservation and Outdoor Education, Ohio Department of Education; and Norville L. Hall, Chief, Division of Parks and Recreation, Ohio Department of Natural Resources. All gave freely from their storehouse of knowledge and experience to provide guide lines and information. Our thanks go to many other resource people in geology, botany, zoology, and ecology. A special tribute is given to the late Dr. Charles Dambach of Nature Conservancy and The Ohio State University School of Natural Resources, who with J. Arthur Herrick of Kent State University provided inspiration, confidence, and the first list of natural areas. This was an inventory made for the Ohio Bio-



logical Survey in 1962, and since twice revised.

To members of the staff in the Divisions of Wildlife. Forestry and Reclamation. Parks and Recreation, and Geological Survey of the Ohio Department of Natural Resources, we owe a tremendous debt for supplying accurate descriptions of state owned properties. The Unit Conservationists of the Soil Conservation Service, the County Agricultural Extension Agents, the Farm Foresters, all were generous in giving information leading to the discovery of areas with educational potential. Officials in the Muskingum Watershed Conservancy District, as well as those of the Miami and Maumee Conservancy Districts, were interested and cooperative. Metropolitan, County and City Park directors and naturalists gave good detailed information.

State officers of various churches provided names of owners and descriptions of camp properties for the study. Boy Scout, Girl Scout, Camp Fire Girls YMCA and YWCA executives and camping chairmen have graciously granted, where practical, the use of their

camps for field trips or school camping.

Without the final editorial assistance of Mrs. Beverly Lee, Consultant in Recreation and Outdoor Education, the book could not have been completed. Mrs. M. C. Markham, Naturalist Educator at the Dawes Arboretum, deserves credit for assistance in visiting sites and for editing.

To others, too many to delineate, we extend our appreciation with a hope that the Guide may lead, ultimately, to a better understanding and appreciation for our natural environment and a cautious approach to eliminating or altering important segments of it.

It is recognized that all sites in the state suitable for outdoor education are not included in this volume. There are many excellent ones which have been visited and described but the owners have withheld permission to list, primarily from concern that visitors would harm the area. In addition there are sites about which enough information was not available to be certain of their suitability and educational value. In a few cases where considerable duplication was found within a county some were omitted. This was especially true for private camp sites and vacation farms.

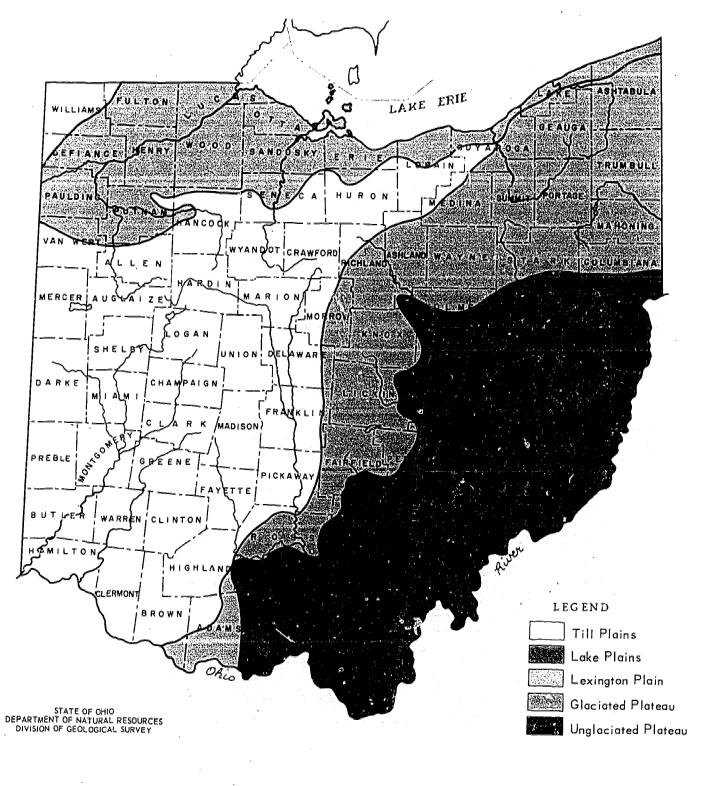
We know there are many camps, parks, and private properties suitable and possibly available whose owners were not contacted for a description. We invite persons aware of such sites to notify The Ohio Academy of Science, 505 King Avenue, Columbus, 43201, in order that we may provide information to interested agencies or individuals. This project will continue and a file will be maintained for each county. Any future revision of the Guide

will include such properties.

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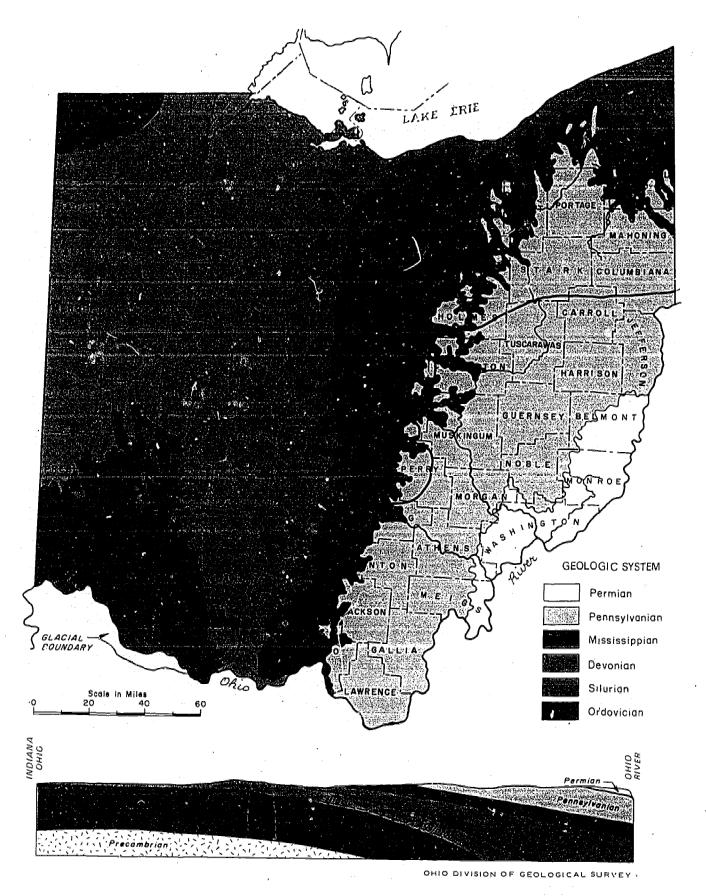






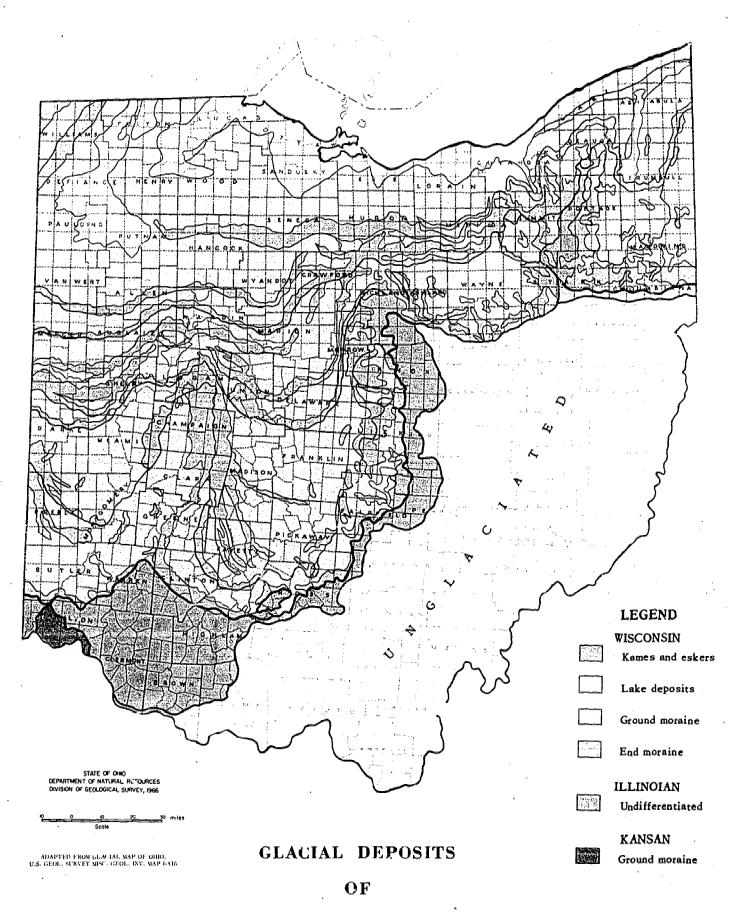
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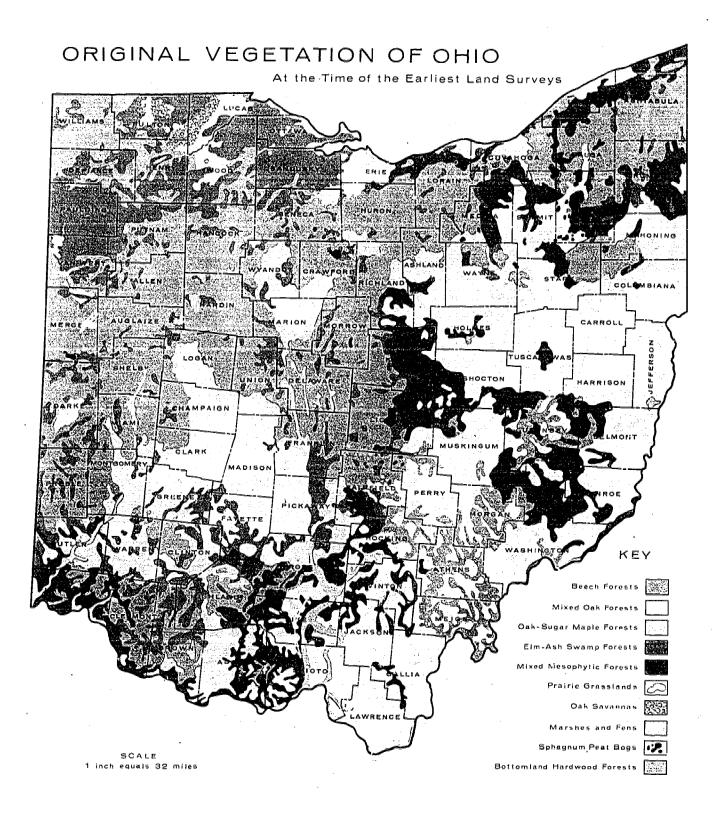


GEOLOGIC MAP AND CROSS SECTION OF OHIO











HOW TO USE THE GUIDE

This book is designed primarily to give teachers and youth group leaders information necessary to select and plan a field trip or a school camping program. It is suggested that persons using the guide first read the descriptions of areas within his or her county. The county index map will help locate adjacent counties where sites may be near enough to be considered. Some counties are woefully lacking in number and variety of areas, due to the general use of the land or the fact that adequate descriptive information was not available.

If the name of an area is known, but not its county location, the index should be ex-

amined. Names are listed in alphabetical order.

It is essential to use the facilities charts to determine what is available at each site. The charts alone give this information. The lack of facilities may be the deciding factor in selecting a site.

One other piece of important information is on the charts. The areas have been categorized for convenience and this is the first item listed. The categories and their abbreviations are as follows:

Natural Environment: Abbreviation on chart is NE. These are areas of many types suitable for study of physical environment, one or more habitats or communities, and/or pioneer history, prehistory, or Indian lore. These areas may or may not include sites of scenic splendor. All areas listed, even under other categories, have Natural Environment characteristics in addition to the specialized interest. For instance, sites where school camping is indicated as the category are excellent field trip possibilities for natural environment observations.

Nature Preserves: A separate chapter has been devoted to these very special areas. They are "living museums", to be studied by advanced students or special small groups. They are usually without facilities and are not included on the charts. This chapter should be read for a knowledge of some of Ohio's outstanding remnants of woodlands, swamps, prairies, glacial relic vegetation, and geologic

phenomena.

School Camping: Chart abbreviation SC. These are camps, outdoor education workshop areas or nature centers where resident school camping already exists or where owners are willing to cooperate with such programs. Facilities may or may not include winterized sleeping quarters. Since site previews and reservations must be made for use of all sites, additional information may be procured at that time.

Conservation Education Areas: Chart abbreviation is C. These are sites which provide demonstration areas or illustrate the wise use of natural resources. Included are farms using approved conservation practices, fish hatcheries, nurseries, weather stations, reclamation areas, hydrologic stations, and others.

Undeveloped Areas: Chart abbreviation U. These are usually public lands, roadless and undisturbed, lands earmarked for future development, or retained as green islands for future generations.

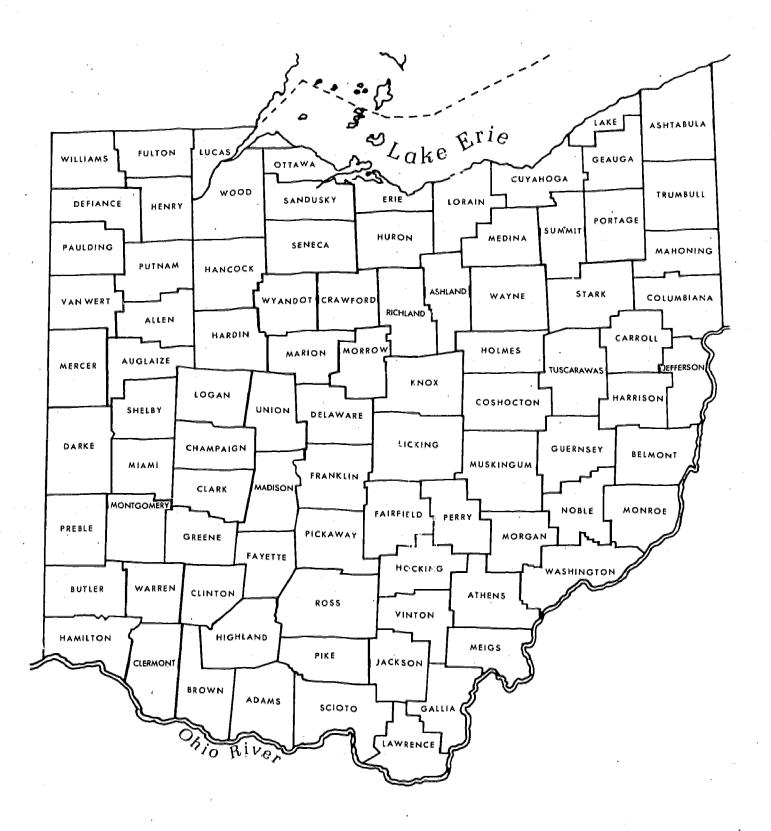
Emphasis if placed on obtaining permission from each property owner or manager to use a site, regardless of catagory. Our commitment to these people has been that permission for each visit is mandatory. Even for state, metropolitan, county, or city parks, it is helpful to both leader and manager to know when a class or youth group is on the premises. In most cases, arrangements can be made for facilities and/or a naturalist's services, trail guides, maps, and road information.

Care of the property, too, must be guaranteed. A necessary part of education is respect and appreciation for the property of others. This includes no littering, no picking or trampling of flowers or other plants, no collection or abuse of animals, and no facilities used unless prior arrangements have been made. It means staying on trails or paths. Rocks may be lifted in a stream to examine life beneath, but they are then replaced as before. Salamanders, turtles, fish, frogs, insects, and other animals may be examined if they are released promptly and unharmed.

A trip preview is utterly essential. A careful examination of the area in advance leads to a pleasurable as well as an educational experience. We cannot delineate all the necessary preparations and procedures for a field trip in this volume, but we emphasize the importance of this. (See Planning and Proceeding with a Field Trip, Ohio Woodlands, May-July, 1970).

The use of maps has been an important procedure in the preparation of this guide. The list of references contains the state geology, glacial, soils, water, and natural vegetation maps. Because physical factors have proved to be essential to an understanding of environment, because we now know that protection of environment requires a knowledge of soils, drainage, watersheds, depth of glacial deposits or bedrock, the minerals for soil determination and such tactors, the descriptions of areas have included this type of information when possible. Further study can be made by using the county bulletins and topographic maps available at the Ohio Geological Survey, 1201 Grandview Avenue, Columbus, Ohio 43212. A publication list will be sent upon request. The writer has drawn heavily on Dr. Wilbur Stout's (and associates) book, Water in Ohio, as well as county geologic bulletins for information.







ADAMS COUNTY

ADAMS LAKE STATE PARK

Location: On SR 41, N. of West Union. 95 acres

Adams Lake State Park is composed of an artificial lake of approximately 47 acres and a large mowed picnic area containing hardwood trees. A few acres reveal natural succession from farmland but the vegetation is limited. Pond life is observable.

Contact: Manager, West Union Phone: (614) 544-2527

BRUSH CREEK STATE FOREST

Location: On SR 73, 1-1/2 miles W. of Rarden. 11,694 acres

This is an extensive, undeveloped area, established in 1928 with the objective of bringing denuded and fire-damaged timberland under forest management. The terrain is hilly with an oak-hickory forest containing wild flowers, rabbits, squirrels, deer, and other wildlife. A fire tower is on the property. Plans for development include extensive water impoundment. The property extends into Pike and Scioto Counties.

Contact: Manager, Rt. 3, Peebles, O. 45660 Phone: (614) 372-2469

CAMP WOODLAND ALTARS

Location: At the conjunction of Highland, Pike, and Adams Counties. 400 acres.

Camp Woodland Altars is a church camp in the process of developing extensive outdoor camping facilities with a winterized lodge accommodating 50 people. Three hundred twenty acres of the property are timberland containing a wide variety of hardwood trees, a profusion of spring wildflowers and hiking trails to see them. The area abounds in pioneer history and Indian lore as well as being the site of a geologic feature, highly controversial, known as a cryptoexplosion structure. This is a circular area of some 10,000 acres showing a high degree of disturbance either by internal volcanic forces or by meteorite explosion. The proximity of the camp to Serpent Mound and Fort Hill adds to its value for outdoor education.

Contact: Manager, Camp Woodland Altars Rt. 4, Peebles, O. 45660 Phone: (614) 588-2559

EDWIN H. DAVIS STATE MEMORIAL (Cedar Fork)

Location: 3 1/2 miles SE, of Peebles. 80 acres

Owned by the Ohio Historical Society, this area has had clear-cut foresting a number of times. It now shows natural succession of mixed flora, some requiring acid soil, others the calcareous soil resulting from the weathering of Silurian age dolomite. Outer blue grass and arbor vitae are abundant. A stand of bamboo marks the site of past habitation. Two trails have been well developed with self guiding material available upon request.

Contact: Manager, R.R. 4, Peebles, O. 45660 Phone: (614) 587-2796

SERPENT MOUND STATE MEMORIAL

Location: On SR 73, 4 mile NW, of Locust Grove, 60 acres

Located on the east bluff of Ohio Brush Creek beyond the boundary of glaciation, this area lies on dolomitic rocks of Silurian age. Of special interest historically, this is an outstanding effigy mound in the shape of a serpent, the largest known mound. One quarter mile long, with seven deep curves in the heaped up earth material, the serpent is in the act of uncoiling. In its open jaws lies a small mound representing an egg. Excavations have been inconclusive but some authorities believe it to have been built by the Adena Indians from 1000 B.C. to 400 A.D. Helpful in interpretation is a museum which also has information and saleable items. The area has much to offer for a multipurpose field trip. Near the effigy is an unusual, world renowed geologic feature, the cryptoexplosion structure of volcanic origin.

Contact: Manager R.R. #4 Peebles, Ohio 45660 Phone: (513) 587-2897

TRANQUILITY WILDLIFE AREA

Location: NE. of Tranquility off SR 770. 3,581 acres

A large acerage, partially wooded with oak-hickory forest, it contains several small ponds which provide habitat for fur species of animal; also for fish and waterfowl. Cottontail rabbit, quail, squirrel, woodchuck, raccoon, muskrat, mink, skunk, and opossum are the principal upland animals. Deer and ruffed grouse may be seen in the forest.

Contact: Division of Wildlife, District 5 Office R.R. #3, Xenia, O. 45385 Phone: (513) 372-7668

ALLEN COUNTY

CAMP TOKUMTO

Located at intersection of SR 198 and Conant Roads in Amanda Township, W. of Lima. 80 acres

This is an area which contains a lake, a creek, approximately 20 acres of woodland and a grassland habitat. Hiking trails lead to animal and plant study sites.

Facilities are available in the acreage developed for recreation purposes.

Contact: Manager 1906 Wendell Ave. Lima, Ohio 45805 Phone: (419) 229-2131

DEEP CUT PARK

Location: On W. side of SR 66 on the county line near Spencerville. 6 acres

Deep Cut is a 6,600 foot long excavation through a glacial moraine, which served as a part of the Miami and Eric Canal linking Cincinnati to Toledo. Water remains in this section of the canal adding to the site's beauty and ecological interest.



ALLEN-ASHLAND

Deep Cut Park is a rest area primarily but provides, in addition, trails on the high east bank and along the original towpath. A historical marker and plaque designating the site as a National Historic Landmark emphasize its value as a part of Ohio history.

Contact: Ohio Department of Highways Lima, Ohio

FORT AMANDA GUN CLUB AREA

Located on Mills Rd. between Rt. 117 and Fort Amanda Rd. 148 acres

This is a hunting preserve for club members but if proper arrangements are made in advance with the manager, field trips may be conducted. The entire area is maintained for wildlife protection with hunting and fishing in season permitted for members only. Pheasant, rabbit and quail are abundant. Three small lakes and 60 acres of mixed forest types and grassland provide food and cover for a wide variety of wildlife.

Contact: Manager. M. J. Zapp Rt. 4 Mills Road Buckland. Ohio 45805 Phone: Buckland 2640

LOST CREEK RESERVOIR

Located 1 mile E, of Lima on High St. Rd. 112 acres

This is a large water supply upground reservoir owned by the city of Lima. The reservoir contains many fish species, and has a limited shoreline growth of cattails. During spring and fall, migrating waterfowl may be observed using the lake; these are often canvasback, redheads, scaup and other diving ducks. Other common visitors are Canda geese, blue and snow geese, mallards and black ducks. Lost Creek flows adjacent to the reservoir on the east.

Because the reservoir is in close proximity to the Lima residential area, no extensive woodland or unaltered grasslands are present.

> Contact: Director of Utilities Municipal Building Lima, Ohio 45802 Phone: (419) 229-2891

SWISS FARM — BLUFFTON COLLEGE OUTDOOR EDUCATION CENTER

Located 1/2 mile N., and 1/4 mile E. of the Bluffton College Campus, 104 acres

The Swiss Farm has been developed as a field laboratory for training students in ecology, botany and zoology. The college personnel, realizing the importance of outdoor education for school children, invite groups to study the natural world under the guidance of trained naturalists. The area also serves as a sanctuary for protection of wildlife and native plants,

A rich variety of habitats include an eight acre pond with marshes and an island; twenty acres of woodland, flood plain and cropland. An old orchard and black walnut grove provide additional learning experiences. A renovated centuryold house, built by early Swiss settlers, may be used as a conference center or weekend retreat for small groups. The education center provides space for lectures, discussions and films as well as exhibits and library. The area lends itself well to interpretive bikes, study of many birds, mammals, reptiles, fish and vegetation.

> Contact: Naturalist, Swiss Farm Bluffton College Outdoor Education Center Bluffton, Ohio 45817 Phone: (419) 358-8756

WINONA LAKE

Located on Bruse Road in Shawnee Township. 50 acres

Winona Lake is a plot developed with the help of Soil Conservation Service primarily for recreation purposes. However, hiking trails lead to the 16 acres of woodland of mixed hardwood trees as well as to a sizable lake, grasslands and croplands. Shore birds are seen at the lake; other animals and plants may be found for observation. No charge is made for school groups.

Contact: Mrs. Howard Wellman 1935 Breese Road Rt. 4, Cridersville, Ohio 45806 Phone: (419) 991-5501

ASHLAND COUNTY

CAMP JUDSON HILLS (OHIO BAPTIST CAMP)

Location: On CR 187, off SR 3, 5 miles South of Loudonville. 260 acres

Camp Judson Hills lies on unglaciated rolling hills along the Mohican River. Approximately 80 acres in the river basin is devoted to a conference center which contains a beautiful winterized lodge overlooking a 3 acre lake. Five modern and winterized cabins and shower buildings are scattered on the hillside back of the lodge. On top of the hill a large tract of woodland and meadow comprise a frontier camp area. Two well marked nature trails have been established which reveal the rock strata of sandstone and shale, a multitude of birds, plants which include beech-maple, oak-hickory associations with club mosses, a wide variety of wood and rock ferns, lichen and fungi. The food provided for resident camping is reputed to be outstandingly good.

Contact: Bert Gilmore Ohio Baptist Convention Box 386, Granville, O. 43023 Phone: (419) 994-4657

CAMP WESLEY

Location: Off SR 95, half-way between Butler and Perrysville, Hanover Township, 120 acres

Camp Wesley is situated on a hill near the shore of Pleasant Hill Lake. Part of the land belongs to the Muskingum Watershed Conservancy District and provides access to the lake.



The area has been permitted to return by succession to natural vegetation. Twenty-three additional acres are leased, and 40 acres upon which the buildings are built contain many trees and shrubs, wildflowers and birds. Sandstone and shale strata as well as glacial till of the Wisconsin age tell the geologic story. Pleasant Hill Dam, with an unusual morning glory spillway, is within easy hiking distance. The property is adjacent to the Mohican State Forest and Park which furnish, more natural features for study. The attractive lodge is winterized.

Contact: Manager Rt. 2 Perrysville, Ohio 44864 Phone: (419) 938-7151



Location: On SR 30 and 430, 8 miles E. of Mansfield. Water-1,350 acres Land-2,050 acres

This extensive water area and surrounding land is a part of the flood control and recreation program of the Muskingum Watershed Conservancy District. The beautiful lake with wooded shores, narrow bays and long winding peninsulas provide innumerable areas for bird study, plant and animal life of great variety.

Contact: Manager Rt. 4, Mansfield. (). 45144 Phone: (419) 368-7171

HICKORY OAKS CAMPGROUND

Located 6 miles East of Butler and South of 97 in the SW. corner of the county. 123 acres

Although this property has been developed primarily for recreational purposes it is rich in Indian and natural history. Wet weather springs and two lakes provide water habitats; fifteen acres of woods contain oak, hickory, dogwood trees, shrubs, wildflowers and animals. There are farm animals also on the property. Land lies partially in well weathered Illinoian glacial deposits, Students are invited free of charge during spring and fall months.

Contact: John and Elizabeth Bellan Rt. 2, Butler, Ohio 44822 Phone: (419) 883-3330

HILLSDALE OUTDOOR EDUCATION AREA

Surrounds Hillsdale High School at Hayesville just off SR 30. , 120 acres

This fortunate school has a large area of land available for immediate use and future development. Approximately 15 acres of woods provide many trees, flowers and shrubs for study. Future plans include a pond for biological research and two large shelters. Facilities are available during school year only.

Contact: Director, Hillsdale Outdoor Education Area Hayesville School Hayesville, Ohio 44838 Phone: (419) 368-4364



MOHICAN STATE PARK AND FOREST

Located on SR 97, East of Bellville. Park -1,151 acres Forest -4,000 acres

Mohican State Park is adjacent to and surrounded by the 4,000 acres of the Mohican State Forest. This large tract is outstanding in its scenic beauty and provides numerous field trip possibilities.

Within the park is the Lyons Falls hiking trail with abundant forest vegetation, wildflowers in season, rock formations and local history. A nature trail on the north side of Clear Fork has been marked. Paths lead along the gorge on either side and one can descend the precipitous hillside down to the swinging bridge. These trails offer equally exciting opportunities for studying geology, botany and ecology. The stream is used frequently for canoeing which is yet another way to study relationship of physical environment, plant and animal life.

The forest was established in 1928 in order to preserve some of Ohio's scenic land. Oak-hickory and beech-maple climax forest, extensive pine plantations as well as native pine, and glacial relic vegetation cover the hilly terrain and steep slopes. A fire tower, saw mill and lumber treatment plant are available for forestry study. A part of the forest, added in 1948, has been designated a Memorial Forest and Shrine as a living tribute to Ohio servicemen.

Clear Fork Gorge is geologically and botanically significant. It portrays a unique glacial-geological story of a westward flowing stream, cutting through sandstone and shale strata, which subsequently was blocked by deposits of an early glacier. The resulting body of water was finally drained through a low place; the water flowed eastward and formed the present Clear Fork Gorge. The hour-glass valley, broad above and broad below the gorge where Clear Fork joins the Mohican, are witness to this tale. The south side of the gorge, covered at the top by a forest of oak and planted white pine becomes progressively northern, a glacial relic vegetation with hemlock, red maple, and Canadian yew growing abundantly in the bottom. The northern slope, exposed to southern sunlight, contains a forest of normal pattern. Red and white oak, tulip, beech and maple with



ASHLAND-ASHTABULA

a bottom covering primarily of syeamore and related plants give contrast to the vegetation of the southern slope. The valley profile indicates a youthful stage of erosion, with steep slopes, numerous headward erosion ravines, recent flood plain deposits, and slump blocks. Trails are steep and not well protected requiring good supervision. The gorge has been named a National Natural Landmark. During the camping season, a full-time interpretative naturalist offers an educational program free of charge.

Contact: Manager, Mohican State Park Rt. 2

> Loudonville, Ohio 44842 Phone: (419) 994-4290

PLEASANT HILL LAKE

Located on SR 95, 7 miles West of Loudonville. Land-1,490 acres Water-850 acres

This lake and dam are a part of the Muskingum Watershed Conservancy District program initiated in 1934 for flood control and recreation. The earthfill dam has an unusual spillway of morning glory design. It is located almost exactly on the line dividing glaciated and non-glaciated land. The low, rolling land north of the dam is in sharp contrast to the deeply eroded gorge of The Clear Fork on the south. The forests, marshes and rocky cliffs on the lake shore provide habitats for a wide variety of wildlife and natural environment study.

Contact: Manager

Rt. 2 Perrysville, Ohio 44864 Phone: (419) 938-7884

YOUNG'S SAND AND GRAVEL OPERATION

Located 2 miles West of Loudonville on SR 39. 300 acres

Earth Science classes may wish to see this extensive operation both to study the kames and glacial outwash deposits along the Mohican River and to collect a wide variety of igneous and metamorphic rocks deposited by the glacier. The company recommends visits in the spring and fall months.

Contact: Young's Sand & Gravel Co.

Loudonville, Ohio 44842 Phone: (419) 994-3040

ASHTABULA COUNTY

BEAUMONT SCOUT RESERVATION

Location: On SR 45 at Rock Creek, 1,200 acres

This extensive reservation lies in an area of flat to gently rolling topography with a few deep ravines cut into the underlying Ohio shale. The Grand River flows through the western part of the property. Two artificial lakes, open farmland now in grass and shrubs, and wooded areas provide diversity in habitat for many plants and animals. Oak-hickory as well as beech-maple forests and their plant associations

can be studied from the hiking trails. The camp, used as a training center, has winterized lodge and dormitories.

> Contact: Director of Camping Greater Cleveland Council Boy Scouts of America Woodland and East 22nd St. Cleveland, Ohio 44115 Phone

> > Phone: (216) 861-6060

BUCCANEER CAMPSITES

Location: On SR 307, 4 miles SE, of 1 90 and SR 45, 270 acres

Most of this campground, designed for recreation activities, is wooded. The forest was timbered many years ago and now contains sizeable hardwoods and natural succession plants. Mill Creek, relatively unspoiled, flows through the length of the farm giving some relief to the flat land. Migratory song birds and waterfowl, deer, mink, raccoon, opossum, beaver and woodchuck are animals seen at least occasionally. Wildflowers are plentiful in the spring. Five miles of hiking trails or rental canoes provide access to desirable study areas,

Contact: Richard J. Buchan Rt. 2, Jefferson, Ohio 44047 Phone: (216) 576-2881 OR 576-1175

CAMP KENISEE

Located on Creek Rd. near Jefferson. 170 acres

This is a private campground used primarily for recreation. However, the area has considerable woodland containing oak, ash, maple, elm, hickory, walnut, dogwood, white pine and hemlock trees. Wildflowers are abundant in season. Glacial deposits and bedrock in the streams provide material for geologic studies. The woodland and forest edge are good habitats for deer, rabbit, woodchuck and many birds. A barn is available for shelter. Hayrides may be arranged.

Contact: Kenneth Carroll Creek Road, Route 2 Jefferson, Ohio 44047

CAMP KOINONIA

Location: On Cold Springs Rd., Harpersfield Twp. 250 acres

Camp Koinonia is a Baptist Association camp serving Akron, Ashtabula and Cleveland. It contains an excellent selection of both deciduous and conifer trees, most of the typical wildflowers and shrubs, as well as the small wild animals associated with such an environment. Two streams join in the middle of the camp providing excellent sites for water life and geologic studies. A winterized lodge and other facilities may make the camp suitable for a school outdoor education site.

Contact: Director & Manager 6810 Cork Cold Springs Rd. Geneva, Ohio 44041 Phone: (216) 466-1278



CAMP LUTHER

Location: On SR 531, 5 miles West of Conneaut. 66 acres

Camp Luther is on a beautiful 90 foot bluff overlooking Lake Erie. The site is heavily wooded and a brook flows into the lake, all of which contribute to its scenic quality. The land lies in the glaciated Lake Plain province near the beach ridge of old Lake Warren. The underlying rocks are sandy shales and thin, hard sandstones of the Chagrin formation, Devonian in age. These are exposed in the bluff and along the stream. The woodland is covered with mixed hardwoods, no species particularly dominant. Wildflowers and small animals are present.

The camp has many comfortable cottages, a rustic lodge and dining hall, playgrounds, picnic areas and chapel. It is used extensively for family camping. School camping or field trips may be arranged.

> Contact: Rev. Kenneth Larkin, Manager Rt. 2, Mansfield, Ohio 44903 Phone: (419) 589-7406

CAMP UNALIA

Location: On the SR 534 in Trumbull Township.

190 acres

Unalia is a relatively new Girl Scout camp with winterized buildings. More than half of the area is covered with mixed hardwoods on flat to gently rolling topography with a few deep ravines and high overlooks. Trumbull Creek flows along the north boundary revealing bed rock and glacial deposits. Open areas are flat and have poor drainage.

Contact: Lake to River Girl Scout Council Niles, Ohio 44446 Phone: (216) 652-5877

CAMP WHITEWOOD

Location: 1/2 mile South of SR 322 and 1-1/2 miles West of SR 534 near Windsor.

230 acres

Regarded as one of the outstanding conservation education facilities in northeast Ohio, Camp Whitewood is already being used by schools during the months of May and June. The camp is located in Warner's Hollow; its large acreage provides three lakes and several streams for wildlife study; woodlands for tree and plant work. Buildings include dining hall, sleeping cabins and staff quarters.

Contact: Frank R. Wilson, Exec. Dir. RD #1, Box 74 Windsor, Ohio 44099 Phone: (216) 272-5275

GENEVA STATE PARK

Location: On SR 534 and Lake Erie. 465 acres

This state park is primarily natural beach sand with some stands of mixed hardwoods of considerable size and some old fields. Beach plant succession and shore-water relationships may be observed. It is a good area for shorebirds but not for waterfowl due to the lack of cover.

Contact: Manager Rt. 1, Geneva-on-the-lake, Ohio 44043 Phone: (216) 487-5488

NEW LYME WILDLIFE AREA

Location: 1 mile East of South New Lyme off SR 46, 529 acres

The state maintains this property for forest-wildlife management purposes. The area is flat and poorly drained. Waterlogged soils persist until late spring or early summer. Many acres of woodland are representative of a typical northeastern Ohio swamp forest composed of elm, ash, soft maple with pin and swamp white oaks. Grouse, woodcock, squirrel and deer are common, with woodcock nesting on the area. Warblers are abundant during spring and fall migration periods.

Contact: Div. of Wildlife District Office 3 912 Portage Lakes Dr. Akron, Ohio 44319 Phone: (216) 644-2293

ORWELL WILDLIFE AREA

Location: 2 miles North of Orwell on East side of SR 45. 193 acres

This area is characteristically flat and poorly drained. A pond provides fishing and offers nesting sites to wood ducks and occasionally black and mallard ducks are observed. Typical swamp forest trees such as pin oak, swamp white oak and maples are dominant. Grouse and squirrel are common.

Contact: Div. of Wildlife District Office 3
912 Portage Lakes Dr.
Akron, Ohio 44319
Phone: (216) 644-2293

PYMATUNING STATE PARK

Located Between U.S. Routes 6 and 322 on the Ohio-Pennsylvania border. 4,919 acres

Pymatuning Lake is an extensive reservoir covering 3,580 acres, a sizeable portion of which is in Ohio. An additional thousand acres surrounding the artificial lake provide many habitats for plants and animals. The topography is relatively flat with swamp forest in the low areas. Slight elevations provide upland conditions for beech-maple woodland. The shoreline is excellent for observing waterfowl and shorebirds, A nature program is conducted during the summer.

Contact: Manager Rt. 1 Andover, Ohio 44003 Phone: (216) 293-3409

SYCAMORE LAKE PARK

Location: On SR 46, 3 miles North of Jefferson, 7 miles South of Ashtabula. 101 acres

Primarily a camping recreation park, this site contains many natural environmental features which could be incorporated into a field trip. The characteristically flat country is dissected by Mill Creek on one side and Griggs Creek on the other. These and two man-made lakes provide sites for water, rock and soil studies. Acres of woodland contain a



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variety of trees and wildflowers in season. Deer, raccoon, beaver, muskrat and birds may be observed.

Contact: Mr. & Mrs. Richard E. Downing. owners Rt. 1, Jefferson, Ohio 44047 Phone: (216) 576-5781

ATHENS COUNTY

THE BUCKEYE TRAIL

Location: From Murray City, North through Trimble Wildlife Area, and Burr Oak State Park.

The Buckeye Trail enters the county in the extreme north block and proceeds north and east. It goes through the Trimble Wildlife Area on the rounded hills of the Allegheny Plateau. It crosses a branch of Sunday Creek which is the major stream responsible for eroding through the Pennsylvanian age rock formations below. The Trimble Area is largely farmland returning to forest through succession and planting. The walking is good, the country scenic. The west side of beautiful Burr Oak Lake is followed for some distance through the park. The trail leads north to the head of the lake through second growth woodland and pine plantations. It turns south and east in an arch at that point. From here it follows an old railroad right-of-way which encounters an unfinished tunnel and cut where good rock sections are exposed. For maps, topographical index sheet, and further information contact:

The Buckeye Trail Association 913 Ohio Departments Building Columbus, Ohio 43215 (614) 469-3984

GIFFORD STATE FOREST

Location: 1 mile NE, of Sharpsburg on SR 377. 320 acres

Gifford Forest lies in the northeast part of the county on wooded hillsides and ravines cutting into sandstones and shales of both Pennsylvania and Permian age. The area was a gift of the Selby heirs, presented to the State in 1959. The woodland is covered with oak-hickory, maple forest and the wildflowers and animals typical of southeastern Ohio contribute to an interesting natural environment. Of interest, also, is a seed orchard which was started for production of high quality tree seed.

Contact: Caretaker, Gifford State Forest Rt. 2, Chesterhill, Ohio 43728 Phone: (614) 554-6617

STROUDS RUN STATE PARK

Located on U.S. 50 East of Athens. 2,606 acres

Strouds Run, now dammed to form lovely Dow Lake, had formerly eroded its way through sandstones and shales of Pennsylvanian age to create a beautiful scenic area. The park around the lake is mostly wooded with oak-hickory forest type. Many kinds of wildflowers, shrubby plants and evidence of small wild animals add to the study possibilities of the area.

Contact: Manager, Strouds Run State Park Rt. 3 Athens, Ohio 45101 Phone: (614) 592-2302

TRIMBLE WILDLIFE AREA

Located on SR 68. West of Glouster. 2.091 acres

Located in the scenic, extreme north central part of the county, this area is rich in wildlife habitats. The topography is hilly, consisting of deep, moist ravines and dry, rounded ridgetops. American beech, sugar maple, red oak and tulip trees grow in the ravines and on the lower slopes. Mixed oak-hickory stands are characteristic of the drier ridges. Various species of wildflowers typical of the eastern deciduous forest are abundant in season. These include trillium, hepatica, rue anemone, bloodroot and cut-leaf toothwort. Wildlife that can be seen or hunted in season on the area includes gray squirrel, ruffed grouse, white-tailed deer, raccoon and cottontail rabbit. Tour arrangements should be made well in advance.

Contact: Division of Wildlife District #4 Office 360 East State Street Athens, Ohio 45701 Phone: (614) 593-6933

WATERLOO FOREST (NOW IN ZALESKI STATE FOREST)

Located 2 miles South of Mineral on SR 356. 447 acres

Waterloo Forest was the first state forest, sequired in 1916 largely for the purpose of trying out the saitability of various tree species for reforestation purposes. As a result, the surviving plantations are some of the oldest in the state. The area is hilly with moderate slopes cut in the rock strata of Pennsylvanian age. The forest type is oak-hickory with typical spring wildflowers. Rabbit, squirrels and many species of birds may be viewed. A fire tower provides an additional means for studying conservation practices.

Contact: Forest Ranger, Zaleski State Forest Zaleski, Ohio 45698 Phone: (614) 596-5781

WATERLOO WILDLIFE EXPERIMENT STATION

Located at the junction of SR 56 and 356 in the west central part of the county.

The state maintains this reserve and laboratory for forest game research purposes. The land lies within the central hardwood deciduous forest types of oak-hickory, and beechmaple. The area is characterized by steep, dry hillsides, dissected by narrow, moist ravines creating a rough and broken topography in the Pennsylvanian age sandstones, shales, coal beds and limestones. The many developed trails, the facilities and the laboratory displays concerning forest research and management make this area a particularly choice one for field trips. If proper time is spent in the forest, groups may be able to view gray and fox squirrels, grouse, turkey, deer and many song birds. A colored slide talk and guide service may be requested with advance registration. A new fire tower provides an additional conservation study facility.

Contact: Manager Rt. 1

New Marshfield, Ohio 45766 Phone: (614) 664-2745



WAYNE NATIONAL FOREST

Located in NW., C. and NE. parts of county. 128,000 acres

Dispersed among 14 Ohio counties are 128,000 acres of land labeled Wayne National Forest. In Athens County the acreage is concentrated in the north, northwest, and east parts. Snake Ridge in the extreme west. Utah Ridge near Doanville in the north central section and Burr Oak in the east constitute the wooded areas in the county. Much of the territory is exhausted farmland, originally forest, now being reforested for timber, watershed protection and recreation. Wildlife is recognized as a primary resource and the Forest Service carries on an active program of improving the forest habitat cooperating with the Division of Wildlife in the Ohio Department of Natural Resources. This activity creates many acres of woodland suitable for the study of plant and animal association. Among the projects carried out are the development of ponds and the creation of openings for use by wildlife. Regulated timber harvesting is also practiced and various-sized cutting areas create temporary wildlife openings. A part of the Forest known as Buffalo Beats, located in Dover Township, is on heavy calcareous clay soil and contains typical prairie plants. These include big and little blue. stem, blazing star and post oak. The area is less than one acre and is surrounded by oak forest on typical sandstone soil, It has long been used by Ohio University botany classes.

> Contact: District Ranger U.S. Forest Service Athens, Ohio 45701 Phone: (614) 593-7273

AUGLAIZE COUNTY

CAMP ST. MARY

Located East end of Grand Lake St. Marys on SR 364 105 acres

Camp St. Mary, with its buildings clustered on the water-front of a large lake, offers a limited natural environment. Some trees remain from the earlier maple forest; some have been planted. No extensive woodland, however, shelters wildflowers or animals. But the water habitat attracts many shorebirds and waterfowl, and provides opportunity to observe plant and animal life associated with the shore. A large, winterized lodge accomodates 80 people; dormitories, cabins, and other facilities are available.

Contact: Robert E. Cochran, Director 200 Madison Ave. Findlay, Ohio 45840 Camp Address: Rt. 2, St. Marys, Ohio Phone: (419) 394-2151

FORT AMANDA STATE MEMORIAL

Located 9 miles NW. of Wapakoneta on SR 198. 10 acres

Situated along the Auglaize River, this plot is significant primarily for historical and esthetic reasons. However, because it is rather heavily wooded with native Ohio trees of beech-maple association, it may well be used for a multipurpose field trip studying natural history and human ecology. Originally the site of an Indian Village, Fort Amanda

was built in 1812 as one in a system of fortified supply depots in Ohio. A simple obelisk was erected by the state in 1915 to perpetuate the memory of the men who served and died there.

No reservations are required as the site is open to the public. For further historical information:

Contact: The Ohio Historical Center Columbus, Ohio 43211

HOGE WOODS

Located 1/2 mile SW. of New Knoxville on SR 219. 41 acres

The Hoge Lumber Company is managing these woods for timber production. Selective logging is practiced, cutting only trees which show indications of dying or degradation. Natural reforestation continuously takes place from seedlings after trees are removed. There are excellent specimens of white, bur, and red oak, ash, hickory, with some beech and maple in association. The less common species are basswood, maple, sycamore and dead elm which are found in the forest also. Many understory wildflowers typical of neutral soils grow in abundance. These include Jack-in-the pulpit, trillium, hepatica, violets, swamp lilies, wild geraniums, spring beauties and others. Squirrels, rabbits, muskrats and other small game animals, as well as deer, are sighted. This is also a good site for forest and edge-of-the-forest birds. A word of caution is given by the owner regarding poison ivy. He is willing, nontheless, to share this lovely woods with appreciative groups.

> Contact: Hoge Lumber Company New Knoxville, Ohio 45871

POHLMAN WILDLIFE HABITAT

Located on SR 198 on the Auglaize River near Fort Amanda. 25 acres

This small area of woodland and natural succession or reforested farm land is maintained as a wildlife sanctuary by the owners. The trees are characteristically oak-hickory association, some beech and maple, with an abundance of understory wildflowers in the spring. Nesting birds such as Canada goose on the river in spring and numerous winter-fed birds may be studied. Trees and shrubs that will attract birds have been planted to increase the number. A wooded ravine was dammed several years ago and provides water habitat for plants, fish, turtles and frogs.

Contact: Mr. & Mrs. Hugh Pohlman Rt. 4 Cridersville, Ohio 45806

Phone: Buckland 2926





ST. MARYS FISH FARM

Located at the East end of Lake St. Marys. 71 acres

Almost 52 acres of this area are devoted to rearing and holding ponds, a complete water system and jar hatchery building. This fish farm is used primarily for the production of largemouth bass but it produces all the northern pike used in Ohio's stocking program. Breeder northern pike are held for stripping and muskellunge are reared to breeder size.

Typically, the area is also valuable for bird study. A large variety and number of waterfowl and shorebirds may be found during fall and spring migration. Canada Geese, mallards and smaller numbers of other waterfowl nest in the area. The management encourages visitation for viewing fish from March through September; for birds, all months of the year. St. Marys State Park is nearby.

Contact: Manager, St. Marys Fish Farm St. Marys, Ohio 45885

Phone: (419) 394-5170

BELMONT COUNTY

BARKCAMP STATE PARK

Located South of I-70 a few miles West of St. Clairsville.
1.238 acres

Belmont Lake, approximately 117 acres in area, is surrounded by 1,121 acres of park land. Situated in the maturely dissected sandstone and shale strata of late Paleozoic deposition, the area has considerable topographic relief. Part of the extensive acreage contains oak-hickory woodlands while part shows old field succession from earlier farming practices. This is particularly noticeable on the uplands. Together with the lake, the area thus provides a wide variety of habitats for studying plant and animal life.

Contact: Manager, Barkcamp State Park Rt. 1, Belmont, Ohio 43718 Phone: (614) 484-4064

CAMP COONEY

Located at Lloydsville 1-1/2 miles West of the Ohio University Branch exit of 1-70. 58 acres

A recreation area primarily, Camp Cooney consist of natural growth woodland undisturbed since 1935, and several pine plantings. A carriage house of pioneer vintage show handhewn logs and peg construction. Facilities are available for a lunch period which is an attractive feature since this site is only ten miles from Dysart Woods. No fee is charged to teachers or youth group leaders.

Contact: Roberta Hagmaier Rt. 1, Camp Cooney St. Clairsville, Ohio 43950 Phone: (614) 695-0504

CAMP PIEDMONT

Located in the NW. corner of the county.
40 acres

Camp Piedmont is a 4-H camp located on the shore of Piedmont Lake. The area is heavily wooded with beech-maple and oak-hickory forest types. Hiking trails give an opportunity to study geologic features and many kinds of wild-life habitats. Facilities include a dining hall and sleeping cabins.

Contact: 4-H Area Extension Agent Box 526 Dover, Ohio 44622 Phone: (216) 343-7625

PIEDMONT LAKE

Location: On U.S. 22 and SR 800, Water - 2,270 acres Land - 4,330 acres

A beautiful lake winding through a portion of the Stillwater Creek Watershed was created by placing a dam in Harrison County near Piedmont. The extensive land area surrounding the lake lies beyond the boundary of glaciation in the highly eroded province known as the Allegheny Plateau. The resistant rocks underlying the area are the limestones, sandstones and shales of Pennsylvanian age. The lakeshores are heavily and almost completely wooded. The hills are covered with beech-maple and oak-hickory stands. Many acres of pine plantation are a result of reforestation for erosion control particularly along the lake shore. Picnic facilities are available at the dam and boat livery as well as at the roadside park on US 22. Camping facilities are found only at the boat livery. A portion of the Buckeye Trail follows the lake south on the west side.

Contact: Muskingum Watershed Conservancy District 1319 Third Street, NW. New Philadelphia, Ohio 44663 Phone: (216) 343-6647

RAVEN ROCKS

Located near Bealsville 20 miles South of I-70. 600 acres

Raven Rocks was the name given to a rugged ravine cut by Little Piney Creek in the western part of the county.



BELMONT-BROWN

The area has been established as a scenic and historic site for recreation and nature study purposes. Raven Rock itself is a canyon with picturesque waterfalls and rock overhangs. An ampitheater below the falls contains a spring. Several erosional features in the canyon bear names such as Devil's Den, Old Woman's Cave and Bear's Den which was just that not too many years ago. Many species of wildflowers may be found along the five mile trail as well as a great variety of trees. Wildlife is abundant, particularly birds. White-tailed deer, once gone from the valley, have returned.

Contact: Raven Rocks, Inc. Friends Boarding School Barnsville, Ohio 43713 Phone: 614-425-3655

UNION SCHOOL LAND LABORATORY

Located at the intersection of I-70 and SR 149. 50 acres

This fortunate school has a comparatively large acreage to study and develop for an understanding of wildlife habitats and behavior. Two farm ponds have been constructed. Several acres are in forest providing an abundance of wildflowers and animals.

Contact: Manager, Union School Land Lab Rt. 1, Belmont, Ohio 43718 Phone: (614) 782-1181

BROWN COUNTY

THE BUCKEYE TRAIL

Location: Extends through North section of county.

The Trail encounters U.S. 50 and the East Fork of the Little Miami River soon after it enters the county. It proceeds along the road, crossing the river on the bridge west of Fayetteville. The blue blazes show the way through the town then march across the almost flat farmland into Highland County. To be noted along the stream are the typical plant communities, the evidence of Illinoian glacial till, the mixture of silt, sand, gravel, and debris from the thin limestones in the valley fill. The area is underlain by the Richmond formation, rock strata of Ordovician age. The Buckeye Trails touches in places the northern border of the Indian Creek wildlife area. Many ponds and marsh lands on the area attract a variety of waterfowl and shorebirds. Limited facilities are available here.

For maps and further information, contact:

The Buckeye Trail Association
913 Ohio Departments Building
Columbus, Ohio 43215
Phone: (614) 469-3984

GRANT LAKE WILDLIFE AREA

Located on SR 68, 3 miles South of Mt. Orab. 412 acres

Primarily a fishing area, this property has 200 acres of water. Studies might be centered around plant and animal associations on the shore and water's edge. Spring and fall migrations bring ducks and shorebirds which include rail and gallinule during fall migration.

Contact: Div. of Wildlife District 5 Office Rt. 3 Xenia, Ohio 45385 Phone: (513) 372-7668

INDIAN CREEK WILDLIFE AREA

Located in the NW. extension of the county off SR 5

1 mile East of Fayetteville.

1.540 acres

Rolling hills and swamp "flats" in the older Illinoian glacial end moraine mark the topography of this section of protected land. Bedrock in the Ordovician period of Paleozoic age are exposed in some stream beds. Many ponds provide nesting for woodcock and feeding for a wide variety of shorebirds. Wooded areas are primarily oak and hickory, the characteristic pin oak profile frequently seen; wildlife abounds in the form of rabbit, bobwhite quail, fox and gray squirrel, raccoon, muskrat, skunk, opossum and waterfowl.

Contact: Division of Wildlife District #5 Office R.D. #3 Xenia, Ohio 45385 Phone: (513) 372-7668

LAKEWOOD

Location: 1-1/2 miles North of the intersection of U.S. 68 and S.R. 125 at Georgetown via U.S. 68, then East one mile on Hamer Rd. 15 acres

This small private area containing a well-stocked lake used primarily for irrigation of greens and tees on adjoining golf course has some interest for the study of environment. Located in the "flats" of an early glacial till plain which was originally a forested swampland the site contains a wide variety of native trees including the abundant pin oak. The area is underlain by calcareous shales and limestones of the Ordivician period and these sedimentary rocks are exposed by eroding streams. Some wildflowers and small animals remain in the wooded areas. No charge is made for field trips only.

Contact: Forrest W. Wahl, owner Rt. 5, Georgetown, Ohio 45121
Phone: (513) 378-8668
OR
(513) 378-6831

OHIO RESEARCH AND DEVELOPMENT CENTER

Located on U.S. 62, 4 miles North of Ripley. 260 acres

Agricultural research, soil and water conservation practices and wildlife protection methods constitute the major part of the program conducted on this site. Located in that part of the western mesophytic forest region on the undissected Illinoian glacier till plain known as the "flats", the area is described as vegetationally unique in Ohio, It was originally occupied by extensive tracts of swamp forest which are now replaced by farmland and second-growth pin oak. This tree is easily recognized by its branch habit, lower branches inclined downward, middle branches horizontal, upper branches extending upward. Invitation for visitation extended for summer and fall months only.

Contact: Manager, ORDC Rt. 1, Ripley, Ohio 45767 Phone: (513) 392-4684



BUTLER COUNTY

BUTLER COUNTY PARK DISTRICT

The purpose of the parks and the preserves of the Butler County Park District containing over 800 acres of forest lands, recreational areas, fishing streams, and boating waters, has been to preserve and restore natural beauty areas for present and future generations. Progress toward this goal has been made on a very modest budget with many parts of the park program yet to be developed. Each park is described giving specific relevant information. Each has available facilities indicated on the chart. For maps and reservation, contact:

Manager, Butler County Park District 2200 Hancock Avenue, Hamilton, Ohio 45015 Phone: (513) 892-1092

CRAWFORD HOME AND WOODS

Location: 2200 Hancock Avenue, Hamilton, Ohio 5 acres

A 136 year old home made of hand kiln brick, and wood which was taken from land of the Symmes Purchase, is situated on this small plot literally abounding in nature objects. Designed to be a bird and small animal sanctuary there is a "Garden for the Birds" in which plantings to attract birds, feeders and bird houses fulfill this objective. This includes houses for encouraging the return of the bluebirds. Numerous old trees primarily of oak and hickory as well as young flowering and hardwood trees serve as a memorial to the Crawfords. Part of the building is the office of the County Park District. Home tours and a recreation room for eating are available by reservation at no cost. The large conference room may be scheduled for meetings.

FOUR MILE CREEK PARK

Located at the end of Four Mile Creek Rd., 6 miles
North of Hamilton.
22 acres

This was Butler County's first park development and features beautiful creekside woodland areas and a low dam which impounds 2 acres of the stream. Forest and aquatic studies are feasible.

GOVERNOR BEBB PARK

Located on SR 126 between Okeana and Scipio in the SW. segment of county near the Indiana border.

230 acres

In this park a heavily wooded forest with 27 species of native Ohio trees contains the reconstructed birthplace of Ohio's 19th governor. A pioneer log village consisting of a school, tavern, pioneer store and two dwellings have been reconstructed around the Bebb cabin. A youth hostel and a bunk house provide complete cooking facilities and sleeping quarters for 32.

Dry Fork Creek, a branch of the Whitewater River, flows through the 230 acre park. High bluffs of Ordivician limestone provide scenic topography in the forest. Wildflowers and small animals may be seen. Facilities include use of youth hostel and bunk house on a reservation basis only.

INDIAN CREEK PARK

Located on SR 732, between Reily and Oxford. 150 acres

This preserve extends along Indian Creek, surrounded by heavily wooded hillsides, and bluffs of Ordovician limestones and shales. The rugged topography and forest trails offer excellent opportunities for nature study which can embrace 26 species of native trees and many wildflowers as well as good fossil hunting and bird study. Three acres of water are maintained, giving shore habitat for plants and animals in summer, recreation in winter. This park is considered a good outdoor laboratory by Miami University classes, both for science and art. Future plans call for a bike trail and a youth hostel.

MIAMI AND ERIE CANAL PARK

Located along Canal, Headgate, and Reiger Roads from Hamilton to Middletown. 170 acres

The historic Miami and Erie Canal lands between Hamilton and Middletown form the basis for this park complex which features several recreation areas, forest tracts and restored areas of the canal. A two mile hiking trail goes along the canal which adjoins Rentschler Forest at Reigert Road. The scenic woodland trail has several vista points overlooking the Miami River.

PATER PARK

Located on the Reily-Millville Road. 200 acres

This park features 15 acres for recreational uses with the remaining 185 acres used for hiking trails, bridle paths, fishing, and hunting. The mixed hardwood forest provides shelter for many birds and other small animals and an overstory for wildflowers. The park includes one mile of access to Indian Creek for aquatic studies and Ordovician fossil collecting.

RENSCHLER FOREST PRESERVE

Located at Reigert Rd., along the Miami and Erie Canal. 27 acres

It is the purpose of the Park District to develop, through good forestry practice, an excellent example of native hardwood forest as found here in pioneer times. The woodland is composed of the oaks, pin and white, red maple, sweet gum, beech and hickory trees, typical of southwestern Ohio. Steep ravines in the Ordovician shales and limestones create rugged topography. Wildflowers are abundant in the spring. Hiking trails with access to the Miami River add to its interest.

ST. CLAIR RECREATION AREA

Located on the Hamilton-Trenton Rd., at Overpeck. 28 acres

This park features a 14 acre lake managed for fishing. It is an abandoned gravel pit reclaimed for recreation. Herbaceous succession plants and some native Ohio trees may be studied.





HUESTON WOODS STATE PARK

Located on SR 732 3,596 acres

Hueston Woods was the name of the original property of this large park. It stands unharmed, an essentially virgin beech-maple climax forest surrounded by man-created installations. A dammed stream forms Acton Lake, comprising 625 acres of the area. An active sugar bush, a nature display center, numerous winterized cabins, a magnificent lodge, tree plantings and reconstructed pioneer homes are a few of the auxiliary features enhancing the natural environment. Not to be ignored are the exposures of Ordovician limestone and shales which are excellent fossil hunting sites. An interpretive naturalist is available all months of the year.

Contact: Park Manager Rt. 1 College Corner, Ohio 45003 Phone: (513) 523-6347



PATER LAKE WILDLIFE AREA

Located 10 miles West of Hamilton off SR 129. 192 acres

Beech, oak and hickory constitute, primarily, the trees of the wooded areas on this property. Protected are numerous upland game species of animals, namely cottontail rabbit, bobwhite quail, fox squirrel, woodchuck, raccoon, muskrats, skunk and opossum.

Contact: Division of Wildlife District #5 Office RFD #3 Xenia, Ohio 45385 Phone: (513) 372-7668

SPRING HILL NATURE CENTER

Location: Surrounds Spring Hill School at 2101 Brell Dr. Middletown. 11 acres

Through the volunteer effort of teachers this elementary school boasts a well developed nature trail as a part of its nature center. The trail winds through a woodland which contains a wide variety of trees, some of them typically found in areas of calcareous soil, notably chinquapin oak and redbud. The trail goes through a meadow and along a creek, part wet and part dry. An eroded area also, has its story to tell. Tree planting and a bird feeder are evidence of student and teacher activity.

Area may be visited during the school year if reservations are made well in advance.

Contact: Secondary Science Coordinator 1515 Girard Avenue Middletown, Ohio 45042 Phone: (513) 423-0781

CARROLL COUNTY

ATWOOD LAKE

Location: On SR 212, 39, and 542 near Dellroy Water - 1,540 acres Land - 2,580 acres

The long, relatively low earth dam was constructed across Indian Fork in 1936 for flood control, water conservation and recreation. The water impoundment is surrounded by a native hardwood forest, extensive pine plantations and fields in natural succession all of which add to the beauty of the area and curb erosion. There are several miles of hiking trails, many camping areas, rental cabins and a beautiful lodge. The area provides an abundance of wildlife habitats which can be discovered by exploration.

Contact: Muskingum Watershed Conservancy District 1319 Third Street, NW. New Philadelphia, Ohio 44663 Phone: (216) 343-6647

BLUE BIRD VALLEY

Location: On Twp. Rd. 193 between Co. Rds. 29 and 69, North of Atwood Lake. 120 acres

This vacation farm is in a quiet, picturesque valley which contains two woodland plots, nature trails and a small lake. Wildlife plantings and natural habitat have been successful

CARROLL

in attracting many birds, among which are several pair of bluebirds. Bare chestnut relics remain and some new young chestnut trees persist. Maples and cherry, ironwood, hickory and aspen predominate in the wooded areas. A small cottage is the only available shelter. On the farm sheep, cows, horses, chickens and ducks may be observed.

> Contact: Ward & Mary Cairns R.D. #1 Dellroy, Ohio 44620 Phone: (216) 735-2790

THE BUCKEYE TRAIL

Located on Twp, roads and along Leesville Lake from Sherrodsville to New Hagerstown. 7 miles

The trail extends through the southwest part of the county. One travels through upland hardwood woodlands of beechmaple, oak-hickory forest type with the wildflowers, shrubs and small animals typical of this association. Along Leesville Lake the path leads through white and pitch pine plantings with 30 or more years of growth. Facilities are available at Leesville Marina.

Contact: The Buckeye Trail Association 913 Ohio Departments Building Columbus, Ohio 43215 Phone: (614) 469-3984

CAMP ALDERSGATE

Location: On East side of Leesville Lake.
40 acres

A new winterized lodge is an inviting feature of this camp property. Situated on the shores of Leesville Lake, the campers have access to more than the campground; namely, the adjoining property of the Muskingum Watershed Conservancy District. The area is wooded, much a result of reforestation at the time the lake was established. There is an abundance of flowers, animals, & good rock exposures in the sandstones of Pennsylvanian age. Hiking trails, sleeping cabins for moderate weather, and other facilities are available,

Contact: Manager, Harry Hortsman, Jr. Rt. 1, Bowerston, Ohio 44695 Phone: (614) 945-2545

CAMP FALCON

Location: On Leesville Lake across from the dam. 200 acres

The camp lies in secluded, forested isolation created by the pine covered slopes going down to the water's edge. It is on the inside of the horseshoe of the lake formed by damming two streams, In addition to the thirteen acres used for the camp activities, a camp ranch, a game preserve of 250 acres, and wooded hills belonging to the Muskingum Watershed Conservancy District provide a variety of wildlife habitat. Mixed hardwood forest, wildlife plantings, fields farmed and fields in natural succession, and several creeks with rock exposures are available for study. Dining and recreation

halls, an infirmary, craft shop, and 13 cabins provide facilities which are not winterized, necessitating use in spring and fall. Hiking trails, canoeing and horseback riding give access to the natural areas.

> Contact: Jack Hardman, Director 2019 Arnold Acres Drive Pittsburgh, Pa. Phone: (412) 921-3350

CAMP MUSKINGUM

Location: East side of the North section of Leesville Lake. 85 acres

Extensively used even now for outdoor education, F.F.A. Camp Muskingum is well adapted to this purpose. The camp is on a hill beside the lake, much of the shoreline reforested in pines, Sandstone outcroppings of Pennsylvanian age are evident at the water's edge. Wooded areas above are typical native hardwoods with many wildflowers in association. Sixteen experimental forestry plots of one half acre each have been planted by resident campers. Soil profiles are available for study of soil types and horizons. A large rustic lodge with assembly hall, food service and sanitary facilities is the central focal point. Four dormitories with a capacity of 300 campers are available. A nature trail is a recent development. All buildings are comfortably winterized.

Contact: John Davis, Manager Rt. #3 Carrollton, Ohio 44625

Phone: (216) 627-2208

CAMP WAKONDA

Location: On Leesville Lake one mile from Leavittsville.
97 acres

Wakonda's acres include woodland beside Leesville Lake, mowed open space for recreation, and fields in natural succession. The shoreline was reforested in pine about thirty years ago, shortly after the dam was constructed. The natural woodland contains maple, oak and cherry with dogwood, crabapple and other plants in association. Wildflowers grow in the various plant communities. Small animals are frequently seen, sometimes deer. Beaver and muskrat may be watched on the lake. A lodge with a balcony provides cooking and sanitary facilities with sleeping quarters for 32 people. Eight sleeping cabins are available for mild weather use.

Contact: Manager of Camp Wakonda R.D. #1 Sherrodsville, Ohio 44675 Phone: (216) 735-3732

GRALEE LAKE

Located on Co. Rd. 171, 4 miles East of SR 9, 2 miles West of SR 39.

Described as an old Indian reservation, this modern dairy farm contains three wooded areas, one of which is devoted to campsites. Mixed hardwood forest type provides shelter for many kinds of wildlife. A large creek boasts a beaver dam, Pennsylvanian age rocks for study, aquatic plants and animals, erosional and depositional stream features.

Contact: Harold and Gwen Moreland Rt. 1, Carrollton, Ohio 44615 Phone: (216) 738-2925



GREEN HILLS TREE FARM

Location: 2 miles South of Carrollton off SR 332. 180 acres

Several miles of woodland trails provide access to a very good assortment of hardwood trees and wildflowers on this tree farm. Small animals seen include grouse and deer, Wildlife plantings and several species of conifers add interest and educational value. Three small lakes provide sites for studying aquatic plants and animals. Maturely dissected Pennsylvanian age rock strata are exposed in various places.

Contact: Donald N. Haugh Rt. #3, Carrollton, Ohio 44615 Phone: (216) 627-2952

HIGH HOPES HOLIDAY HOUSE

Location: On Co. Rd. 12, 1/4 mile NE. of Harlem Springs, just off SR 43. 13 acres

Nestled in a picturesque setting at the base of a ski area, High Hopes Holiday House might serve as home base for a day's field trip. A small pond on the property provides habitat for aquatic plants and animals. The wooded area contains wildflowers and many kinds of birds. The lodge has ample meeting space, but the sleeping quarters on the balcony are limited to 6 persons. The owner's 580 dairy farm is suggested for a visit also.

Contact: R. Edgar Snode Rt. 1, Mechanicstown, Ohio 44651 Phone: (216) 627-2477

LEESVILLE LAKE

Located near SR 212 and 164, NE. of Leesville. Water-1,000 acres, Land-2,620 acres

Leesville Lake is a large impoundment of two creeks at their confluence. It is a narrow winding lake with completely wooded shoreline. For this reason there is little accumulation of silt in the reservoir. Extensive pine plantations were established along the shore during the 1940's shortly after the dam was built. Part of the land adjacent to the public shoreline is leased to resident camps some of which are used for school camping. Picnic facilities are available at the dam and boat liveries.

Contact: Muskingum Watershed Conservancy District 1319 Third Street, NW. New Philadelphia, Ohio 44663 Phone: (216) 343-6647

PRIDE VALLEY

Location: One mile North of Malvern, 320 acres

A vacation farm, Pride Valley has many features of interest. Farm animals, including ponies, and farm operation may be observed. Two ponds provide aquatic habitat for plants and animals as well as swimming. Woodland acres with a large variety of hardwood trees have trails leading to an abundance of wildflowers. Many small animals including

deer may be seen as well as a great number of birds. Rock strata may be studied at an old stone quarry. Hay rides around the property may be arranged.

> Contact: Mr. & Mrs. James Foltz Rt. #1, Malvern, Ohio 44644 Phone: (216) 863-2292

ROLLING Y RANCH

Location: On SR 39, near Sherrodsville, 600 acres

This large ranch and farm used by the Cleveland YMCA for recreation and retreat has much of value for outdoor education. The land lies on the unglaciated, highly dissected Allegheny Plateau, underlain by Pennsylvanian age sandstones, shales, and coal measures. Woodlands are in the oakhickory forest association typical of residual acid soils. Wildflowers and wild animal life are abundant. Streams have eroded through to reveal outcrops of the rocks in ravines. A lake provides for recreation and study of aquatic plants and animals.

The ranch has 53 head of horses, 8 head of cattle, and 3 goats. School camping on week days will be considered.

Contact: Cleveland YMCA 2200 Prospect Ave., Cleveland, Ohio 44115 Phone: (216) 627-4587

TWIN VALLEY FARM

Located 1-1/2 miles NE. of Harlem Springs on Co. Rd. 12 365 acres

Situated in the rolling hills of the area this large acreage is used for both a vacation spot and farming. The extensive wooded areas contain mixed hardwood trees, wildflowers, and small animals. A lake and small stream provide water habitat. An old coal mine and some strip mine areas are accessible for study. Observation of farm animals and farming operations may be included in making arrangements for a field trip.

Contact: Mr. & Mrs. Lewis Dunlap Rt. 2 Carrollton, Ohio 44615 Phone: (216) 739-2811

CHAMPAIGN COUNTY

CEDAR FARM

Located 1/2 mile West of Carysville off SR 29. 140 acres

This beautiful farm provides a wide variety of ecological and conservation education experiences. Seventy acres consist of a reforested succession and woodland tract, farm pond, peat bog, swamp land and gravel-pit. Fence rows are maintained for wildlife feed and shelter. Sixty-seven thousand red, white and scotch pine were planted at various places on the farm. The effects of glaciation are evident in the topography, the soil type, the underlying glacial lake deposits of clay providing springs and bog, outwash sand and gravel, and glacial erratics.

Mosquito Creek on the south border, and Huling Creek on the west have abundant fish, reptiles and aquatic plants including marsh marigolds. The seventy acres of cropland



CHAMPAIGN

are used for popcorn as well as other farm products. Indian and pioneer history enrich the site for multi-purpose field trips.

The owner, widely recognized for his conservation interests and practices, will act as guide for tours. He can arrange hayrides for transportation for 50¢ per person.

Contact: Thurman H, Huling 12475 West Route 29 Conover, Ohio 45317 Phone: (513) 362-2530

GRAHAM LOCAL SCHOOLS OUTDOOR EDUCATION AREA

Located at the rear of the high school, St. Paris. 63 acres

On school property, the 45 acres set aside for a land laboratory are only partially developed. The land is located on an end moraine of the Wisconsin glacier characterized by rolling topography. There are low lying areas which are somewhat swampy ravines cut by erosion. The area has a 1/3 acre pond, a small forest, a pine plantation and some acres used by vocational agriculture students for experimental planting. Included also is an untouched plot for study.

> Contact: Principal, Graham Local Schools 7800 W. Rt. 36, St. Paris, Ohio 43072 Phone: (513) 663-7471

KISER LAKE STATE PARK

Located 17 miles NW. of Urbana on SR 235. 860 acres

The topography of this park is flat to gently rolling, lying in glaciated territory. There is a considerable amount of forested natural area, mesophytic (mixed hardwood) in type. An abundance of water-associated animal and plant life due to the shallowness of the lake and the bordering marshland provide good study areas. The atmosphere is peaceful partially due to the fact that no power boats are permitted on the lake. A seasonal nature program is provided from mid June to Labor Day. Activities include hikes, slide programs, movies, and a Junior Naturalist Program for children ages 9 through 14. An ampitheater and nature center are north of the campground. Several hiking trails, beginning at the picnic areas have been developed. Maps are available upon request.

Contact: Manager, Kiser Lake State Park Box 586, St. Paris, Ohio 43072 Phone: (513) 362-2787

KIZER FARM

Located 1/2 mile West of Millerstown on Ward Road near Kiser Lake State Park. 160 acres

This is a property belonging to and managed by the owner of Cedar Farm. It features 80 acres of succession woodland and timber containing many varieties of trees. Included are walnut, oak, beech, ash, hickory, a large Chinquapin oak, and many young tulip trees. A challenging erosion problem, interesting glacial soils and a portable sawing operation

have attracted vocational agriculture classes to this site in the past. A history, called "The End of a Line," has been written covering four generations of the former owners, the Kizer family.

A day camp site, which includes two old farm houses, has been developed by local Girl Scouts. This may be used with special permission.

The owner will conduct tours for classes interested in ecology, geology, zoology, botany, forestry and conservation practices. Use is possible only when ground is dry or frozen,

> Contact: Mr. Thurman F. Huling 12475 West Route 29 Conover, Ohio 45317 Phone: (513) 362-2530

OHIO CAVERNS

Located on SR 245, 4 miles East of West Liberty at the junction of Champaign and Logan Counties.

100 acres

A natural feature created as the result of descending, dissolving ground water in limestone rocks, Ohio Caverns is unusually colorful and splendid. Cave formations including large and small snowy stalactites and stalagmites, calcite crystals and bands of travertine, adorn the ceilings and passage ways. These are deposits from the evaporation of water which was saturated with dissolved limestone. The park area above ground contains a variety of trees and shrubs. The tour of the underground passages is well conducted but a prior understanding of basic geologic processes would be helpful.

Special rates and services are given to schools during spring and fall. They are advised to make reservations well in advance.

> Contact: Manager, Ohio Caverns, Inc. Rt. 1, West Liberty, Ohio 43357 Phone: (513) 465-4017

SIEGENTHALER FARM

Located on Calland Rd., NW. of Urbana, off SR 29. 16 acres

This property is of interest primarily because it contains outstanding land forms resulting from the last period of glaciation. Glacial outwash deposits in the form of a sinuous ridge composed of bedded sand and gravel rise above the ground surface. Eskers are usually formed in the stream channel of the wasting glacier. This one has the characteristic profile of an esker. Cross-bedding is observable in a cut.

Birds are abundant in the area; swamp habitat as well as the sand and gravel ridges create variety in plants and animals.

> Contact, well in advance: V. L. Siegenthaler 7601 Calland Rd., W. Liberty, Ohio 43357 Phone: (513) 465-3284



URBANA WILDLIFE AREA

Located 6 miles North of Urbana, 1 mile East of SR 68. 549 acres

The Urbana Wildlife Area lies in a glaciated area showing extensive wildlife, soil, water, and woodlot conservation practices. Three small farm ponds provide water habitats. Two woodlots have an overstory of oak, hickory, maple, elm, and cherry; an understory of a dogwood, hawthorn, wild grape, and blackberry mixture. Animals seen include pheasants, quail, rabbits, Hungarian partridge, doves and fox squirrel. The area is enclosed with a chain link fence.

Contact: Division of Wildlife, District #1 Office 1500 Dublin Road, Columbus, Ohio 43212 Phone: (614) 469-3337

CLARK COUNTY

CLARK LAKE WILDLIFE AREA

Location: 2 miles NE. of Harmony, off U.S. 440. 288 acres

One hundred four acres of impounded water makes a good fishing area but in addition creates habitats for study of aquatic plants and animals. Waterfowl are present during spring and fall migrations. Oak-hickory forest and typical wildlife are found in the small woodlots associated with the lake.

Contact: Division of Wildlife District #5 Office Rt. 3, Xenia, Ohio 45385 Phone: (513) 372-7668

GEORGE RODGERS CLARK PARK

Located 3 miles West of Springfield off I-70. 150 acres

This beautiful city park is composed primarily of a large, well manicured section and a lovely woodland containing a seven acre lake. Wisely, the sugar maple and oak forest is being preserved in its natural state. A small stream is captured to form the lake which provides an excellent study area for aquatic plants and animals as well as fishing. The land lies on the edge of a glacial moraine, the soil derived from the till. It is underlain by the dolomites of Silurian age. Herbaceous species in the wooded area are outstanding enough to enlist the interest of Wittenberg College classes.

Historically the site is of interest for its monument to George Rodgers Clark, and for Hertzler House, the site of the Battle of Piqua.

> Contact: Board of Park Trustees City Building Springfield, Ohio 45501 Phone: (513) 325-8754

GUNDOLF'S FARM

Located 1-1/2 miles SE. of Northampton off SR 41. 95 acres

A tour of this farm under the guidance of the owner would include the examination of his farm plan, soil types and conservation practices. Forested area contains 36 species of trees as identified by the state forester of the area. Wildlife dens and feeding grounds and wildflowers may be observed. A winterized shelter and farm pond are available for use.

> Contact: J. Paul Gundolf 2964 Myres Road Springfield, Ohio 45501 Phone: (513) 964-1169

NORTH HIGH SCHOOL LAND LABORATORY

Located on the rear and East side of school building. 92 acres

The land laboratory of this school is utilized as a composite study area for soils, stream erosional and depositional features, evidences of glaciation and Silurian age rock strata, Wooded section contains hiking trails in the beech-maple and white oak forest association. Small animals and deer have made their presence known.

Contact: Fred Wilson, Manager 49 E. College Avenue Springfield, Ohio 45501 Phone: (513) 323-7593

SNYDER PARK

Location: Within city limits on West edge of Springfield. 200 acres

Open woods and flood plain characterize this property. Buck Creek traverses through the park on the east side and it is bordered on the west by the Mad River and a railroad. Spring thaw and rain frequently find both creek and river inundating the area. In addition, the park contains an 8 acre lake. Silurian age dolomites in the Niagara strata are exposed on the north and northeast boundaries. Natural succession plants may be found along the streams and the railroad. Study possibilities are numerous depending on subject emphasis.

Contact: Board of Park Trustees City Building Springfield, Ohio 45501 Phone: (513) 325-8754

CLERMONT COUNTY

THE BUCKEYE TRAIL

Location: Through the North section of County to Stonelick State Park.

The Trail crosses the Little Miami River and proceeds through Miamiville and points east traveling on major trafficcarrying roads and highways. Extreme care must be exercised here. In the eastern part of the county, the Trail follows the southern edge of Stonelick Lake where plant and animal habitats are numerous. (See Stonelick State Park description). For maps and further information, contact:

> The Buckeye Trail Association 913 Ohio Departments Building Columbus, Ohio 43215 Phone: (614) 469-3984



CAMP EDGAR FRIEDLANDER AND CRAG WILDERNESS

Location: Or Ibold Rd., 1 mile East of Miamiville, 860 acres

With its large acreage of woodland along the Little Miami River, this camp and the wilderness area adjoining it have tremendous potential for nature study including geology and glaciation. The river valley itself has the typical profile resulting from carrying melt-water from the Wisconsin ice sheet. Notable are the wide flood plain, terraces, cut banks, natural levee and meandering pattern. The area is within the border of Illinoian drift, the chief influence of which was to leave a thick deposit of outwash silt, sand, and gravel on the old rock floor. The underlying rocks are hard calcareous shales and limestones of Ordovician age.

The properties include a scenic view along Horners Run Creek. Bedrock is exposed and fossil hunting is good. The lush forest, mixed oak in type, contains walnut, maple, sycamore and many other species with an abundance of wild flowers, birds and small mammals.

The large lodge and sleeping dorms are not winterized. Field trips may be arranged.

Contact: Manager, Camp Friedlander Box 629 A., Loveland, Ohio 45140 Phone: (513) 831-6088

CLERMONT NORTHEASTERN LAND LABORATORY

Located near Batavia at 5347 Hutchinson Rd. on U.S. 50. 122 acres

This land laboratory contains 88 acres of woodland with 40 species of trees and 150 native plants. Fourteen acres of fields in natural succession, two streams with exposures of the Ordovician age limestones bearing typical fossils, and two ponds provide ample habitat to study aquatic plants and animals. Forty species of birds have been counted on the property, twenty different kinds of animals and an abundance of insects. The nature center is a part of the school campus which limits visits to school hours. The use of an unsheltered outdoor classroom and autoguide tapes may be requested.

Contact: Earl Thirey Rt. 2, Williamsburg, Ohio 45176 Phone: (513) 724-2649

CINCINNATI NATURE CENTER

Located on Tealtown Rd. South of U.S. 50 at Perintown. 543 acres

Named a "Green Island for Greater Cincinnati" this nature center has become an environmental-ecology learning area for thousands of school children and adults. It is situated on an estate containing a large home which serves as an education center. The building is surrounded with beechmaple climax forest with wildflowers, shrubs and planted daffodils making an understory of tremendous loveliness. Several miles of nature trails provide access to a very natural appearing lake, a gully with a stream eroding beds of Ordovician age limestones rich in fossils, a natural forest area on the stream floodplain and terrace, a cliff exposure of the limestones and shales topped by tillite of Illinoian glacier age. Management units have been established with wildlife plantings, soil and water conservation and pine plantations.

The area abounds in waterfowl and shorebirds, birds-offorest and edge-of-forest and meadow. Small forest animals of a furry nature are abundant also.

For training dates and other information contact:

Director, Cincinnati Nature Center Box 503 Rt. 1 Milford, Ohio 45150 Phone: (513) 831-1711

STONELICK STATE PARK

Located South of SR 727, near Edenton. 800 acres

Stonelick Creek, a tributary of the little Miami River, was dammed to create a lake of about 200 acres. The park area includes a beech-maple woods on the east side of the lake which is a good wildlife area. Fields now is natural succession contain some prairie species. A few marsh areas along the shallow margins of the lake are good study areas for water vegetation and animals. A nature program is conducted during the summer months. The area is relatively flat due to the fact that it lies in the undissected Illinoian glacial till plain.

Contact: Stonelick State Park Manager Rt. 1, Pleasant Plain, Ohio 45162 Phone: (513) 625-7544

CLINTON COUNTY

CAMP KIRKWOOD

Located 5 miles NW. of Wilmington on SR 73. 250 acres

Camp Kirkwood consists of rolling natural succession fields and heavily wooded forest. Dutch Creek meanders through the property exposing outcrops of Silurian age rock strata and showing typical erosional and depositional features. The wooded areas contain many species of trees including maples, beech, oak, hickories and walnut on the well drained areas; sycamore, cottonwood, aspen, honey locust and willow on the low lying flood plain and terrace levels. A small pond for wildlife study is a recent addition. Many flowers and birds may be observed in season. A large lodge has sleeping quarters for 40 persons and food service facilities. The owner recommends use for resident camping from September through May. Field trips may be conducted anytime.

Contact: Ohio Baptist Convention Box 386 Granville, Ohio 43023

CHERRYBEND PHEASANT FARM

Located 2 miles SE, of SR 3 and 22 at Melvin. 375 acres

The primary interest on this property is the hatching, care and growth of pheasants. Chicks are hatched every Monday in the spring and summer. In fall and winter 20,000 pheasants can be watched in their pens. Other animals on the farm are peacocks and hunting dogs. A second growth hickory woodlot with wildflowers would be of interest particularly in the spring.

Contact: Mr. & Mrs. Harold H. Hollister Box 84, Rt. 4, Wilmington, Ohio 45177 Phone: (513) 584-4269



COWAN LAKE STATE PARK

Location: On SR 350 SW, of Wilmington. 1,775 acres

Gently rolling topography typical of the Wisconsin glacier end moraine is a distinctive feature of the park around Cowan Lake. The park property includes an overlap of Wisconsin till on Illinoian till, the latter extending south and west of the dam site. Excellent exposures of Liberty shale and Waynesville shale (Richmond formation) which are very fossiliferous are exposed in the spillway cut. The original Cowan Creek bed may also be explored for fossils. Genera include brachiopods, gastropods, bryozoa and trilobites. The north side has a dense stand of mixed hardwoods with shrubs and wildflowers in association. Seven hundred acres of lake provides ample access for the study of aquatic plants and animals. An interpretive naturalist is available during summer months.

Contact: Manager, Cowan Lake State Park Rt. 1, Wilmington, Ohio 45177 Phone: (513) 289-2443

COLUMBIANA COUNTY

BEAVER CREEK STATE PARK

Located off SR 7, 8 miles NW. of East Liverpool. 2,202 acres

A park rich in wildlife, scenic beauty and historic reminders of pioneer life, Beaver Creek is outstanding for field trips and class study. The creek itself, a wild river, is fairly unpolluted as it rushes with a steep gradient over the Pennsylvanian age sandstones to form a steep walled gorge. Glacial relic vegetation, hemlocks, Canadian yew and members of the heath family, have persisted in the cool moist ravine which is a habitat similar to their northern source. Excellent wildflowers are found in association as well as typical small animals. Hiking trails give access to the observation of all the scenic features. Remnants of the Sandy and Beaver Canal, a privately financed transportation venture of the mid 1800's, are prominent throughout the park. This includes Lusk's Lock, a particularly historic part built in 1836. A restored grist mill is open to the public. Though time has eradicated much of the evidence, portions of the park were stripped for coal.

> Contact: Manager, Beaver Creek State Park Rt. 1 East Liverpool, Ohio 43920 Phone: (216) 385-3091

BEAVER CREEK UNITED PRESBYTERIAN CAMP

Location: Along Little Beaver Creek near Calcutta. 120 acres

The camp is situated in a heavily wooded ravine along Little Beaver Creek above Grimm's Bridge. The rugged beauty of Little Beaver Valley is difficult to surpass in Ohio. The stream, fortified by a great volume of water from the wasting glacier, has cut a deep trench in the upland plains through the largely massive sandstones of Pennsylvanian age. Steep walls varying from 300 to 500 feet in height are topped with lustrous oaks and other hardwoods, gradually yielding to a cover of feathery hemlocks and other species of glacial relic vegetation. Projecting crags have ferns and

creeping plants growing in abundance at their base. Wildflowers grow in profusion; there is evidence of beaver activity and other animal life. Two lodges with sleeping quarters and food service facilities are available for school camping during the week in the spring and fall months. Field trips along old Indian trails may be arranged when eamp is not in use.

> Contact: George Reynolds Beaver Creek Camp Rt. 3, E. Liverpool, Ohio 43920 Phone: (216) 385:3490

BEAVERKETTLE FARM

Located near Fredericktown, 4,000 acres

Situated in one of the most picturesque spots in Ohio, the Vodrey estate is an exciting natural area. Within the property a section of the Little Beaver Creek and the North Fork of Little Beaver, both streams greatly affected in their drainage by their relationship to the glacial boundary, have the steep walls and deep gorges typical of stream reversal. All of the North Fork formerly flowed north but now rushes over sandstone rapids and ripples to join the Little Beaver at the point where the Little Beaver, too, flows south into the Ohio. The upland plains are covered with large oaks and native white pines which give way in the cool moist ravines to feathery hemlocks and other glacial relic plants. Yellow birch, river birch and rare herbaceous plants are found in the association. There is a complete selection of wildflowers in the area and wild animals include grouse and deer. A segment of the Sandy and Beaver Canal adds historic significance. Field trips may be arranged anytime of the year.

> Contact: Walter A. Johnson Rt. 1 Negley, Ohio 44441 Phone: (216) 385-1049

BOY SCOUT CAMP

Location: In Washington Twp. near Salineville on Twp. Rd. 775. 423 acres

This is an area in the Yellow Creek watershed south of the glacial boundary. The glacial waters caused the streams to deepen their valleys to form deep rugged ravines. Pennsylvania age sandstones are exposed in rock ledges. Much of the area is woodland with the oak-hickory forest type on the upland plains and hemlock prominent in the cool, moist valleys. A swamp and several small streams provide aquatic habitats woodland and tree plantings shelter small wild animals and flowers. The property has no buildings so the use is limited to field trips or primitive camping.

Contact: Mahoning Council, Boy Scouts of America 120 E. Rayen Avenue Youngstown, Ohio 44503 Phone: (216) 744-4488



COLUMBIANA-COSHOCTON

CAMP MERRYDALE

Location: 5 miles North of Salem. 17 acres

A small, heavily wooded camp site, this area contains a little creek, wildflowers and small animals. Hiking trails, a lodge, shelter house and other facilities are available. No charge is made for field trips,

> Contact: Camp Registrar Tayanita Council of Camp Fire Girls Rt. 1, Salem. Ohio 44460 Phone: (216) 337-8901

GUILFORD LAKE STATE PARK

Located 20 miles SE, of Alliance on SR 172, 488 acres

Guilford Lake, historically important because it was built as a feeder for the Sandy and Beaver Canal, has little to offer beyond a study of aquatic plants and animals. The hilly topography surrounding the lake is end moraine, a mixture of sand, gravel and clay left by the last glacier when it wasted back after having advanced to its boundary and remained there for a considerable length of time. The area has very little vegetation except for scattered pine plantations.

Contact: Manager, Gulford Lake State Park Rt. 4, Lisbon, Ohio 44432 Phone: (216) 222-3242

HIGHLANDTOWN LAKE WILDLIFE AREA

Location: North of town, off SR 39, Land -2,035 acres, Water - 270 acres

Situated south of the glacial boundary this area is in steeply rolling topography with some flat hill tops and valley floors. Scattered ponds, a lake and beaver dams attract a variety of waterfowl during migration. Mallards, wood duck and teal nest in the reserve. The upland soils are well drained but acid; hill tops are wooded with white oak, red oak, hickory, and pine forest. A large variety of wildflowers are found in numerous habitats. Quail, grouse, and other small animals occur in numbers; deer are seen occasionally. Fish, wildlife, soil and water conservation practices may be observed.

Contact: Manager, Highlandtown Lake Wildlife Area, Rt. 1, Salineville, Ohio 43945 Phone: (216) 679-2201

YELLOW CREEK STATE FOREST

Located near Salineville. 756 acres

Because the land is situated in a coal mining territory, a program to acquire forest lands begun in 1947 was thwarted by conflict over mineral rights. However 756 acres were acquired in three scattered tracts to comprise this state forest. A part of the Yellow Creek Watershed, the area has gently rolling uplands dissected by streams to form deep ravines with steep slopes. The upland vegetation is oak and other hardwoods, with reforestation of pine plantings. Ravines contain glacial relic vegetation, hemlocks and other

northern plants which seeded in front of the glacier and persisted in the cool microclimates after the glacier wasted back. Woodlands harbor rabbits, squirrel and deer as well as numerous wildflowers. Field trips may be arranged through:

> J. T. Lenox 1888 E. High Street, Ext. New Philadelphia, Ohio 44663 Phone: (216) 343-3615

ZEPERNICK LAKE WILDLIFE AREA

Location: On SR 172, 2 miles East of New Alexander, 513 acres

A 30 acre lake, a small pond, woodland and rolling to steep topography are the physical features which provide numerous types of habitat for plants and animals. A variety of waterfowl are seen in spring and fall; wood duck and mallards use it for nesting. The well drained upland have oak and hickory trees as the dominant species. Fish, wildlife, soil and waterconservation practices may be seen.

Contact: Division of Wildlife District #3 Office 912 Portage Lake Drive Akron, Ohio 44319 Phone: (216) 644-2293

COSHOCTON COUNTY

MOHAWK RESERVOIR

Location: On SR 715, near Walhonding. 3,700 acres

A dry reservoir designed for flood protection, this large area remains essentially in its original state, modified only by natural succession and pine plantations. Most of the land is wooded with native mixed hardwood stands with typical plant and animal associations. The Mohican and Walhonding Rivers wind through a scenic area which has Mississippian age sandstones exposed on occasional cliffs.

Facilities are available at the roadside park adjacent to the dam.

Contact: Muskingum Watershed Conservancy District 1319 Third Street, NW. New Philadelphia, Ohio 44663 Phone: (216) 343-6647

MOHICAN RIVER ACCESS

Location: On SR 715, West of Walhonding. 370 acres

This area includes natural flowage of undefiled water capable of supporting the native fish population. The Mohican River is bordered with an interspersion of large, soft maple and symmore with native hemlock and Eastern red cedar growin—the north facing hillside. The stream habitat contains—desirable population of animals including raccoon, squirrels, and mink. Various shorebirds, rail, heron, and an occasional osprey may be seen. Waterfowl consists mainly of woodduck, mallard and blue-winged teal. Many species of forest birds are found in the wooded areas,

Contact: Division of Wildlife District 4 Office 360 East State Street Athens, Ohio 45701 Phone: (614) 593-6993



MUSKINGUM VALLEY SCOUT RESERVATION

Located near Conesville off U.S. 16. 500 acres

This Boy Scout camp is situated on a Muskingum River terrace and strip mine land. Eighty per cent of the acreage is woodland, native on the hill tops, plantings and natural succession on the valley floor. As many as 100 different kinds of trees and shrubs have been named. Birds and small animals are numerous; deer are seen occasionally. Six lakes as well as the river give access to study of aquatic plants and animals. Mississippian and Pennsylvanian age rock strata are exposed in the cliffs hillsides and at stream level. The camp is near the Columbus and Southern Ohio Electric plant which is fed coal for processing on an impressive conveyer system from coal field to plant. A winterized lodge and hiking trails are available.

> Contact: Camp Manager, Muskingum Valley Scout Reservation 1405 Maple Avenue Zanesville, Ohio 43701 Phone: (614) 453-0571 (camp) (614) 828-2662

PILGRIM HILLS CONFERENCE CENTER

Location: On SR 206, 2 miles South of SR 62. 200 acres

Rolling hills topped by Pennsylvanian age rock strata provide the setting for this lovely retreat. Rich in a variety of habitats, many kinds of trees, wildflowers, birds and other animals may be observed. A stream running along the south side of the property gives access to the study of water plants and animals as well as the exposed rock layers. Nature trails have been developed also an ampitheater and "Fern Chapel". Facilities provide space for cold weather programming. Overnight accommodations are available for 100 persons in heated sleeping quarters with adjacent modern bath facilities.

> Contact: Mr. John Vicsak, Manager Rt. 1, Brinkhaven, Ohio 43006 Phone: (614) 599-6314

U.S. HYDROLOGICAL RESEARCH STATION

Location: 10 miles North of Coshocton on SR 621. 1000 acres

This property is devoted to research on rainfall, runoff, water penetration in soil, effects of plantings, and strip cropping in a single small watershed. The results of this research are circulated to farmers working in similar areas to help them in land-use practices. Lysimeters which are large instruments designed to measure water run off may be observed. Observation of numerous conservation practices in various environments are a part of the guided tour. Tours may be arranged for weekdays and Saturdays, May through October. A field trip to the station is a tremendously valuable experience for junior high age and up.

> Contact: Manager, Hydrologic Research Station P.O. Box 460 Coshocton, Ohio 43812 Phone: (614) 545-6349

WILLS CREEK LAKE

Location: On SR 76, 12 miles South of Coshocton. Land = 2,790 Water = 900

A long, narrow man-made lake meanders through the rolling hills of southern and eastern Coshocton County, and along a portion of the northern part of Muskingum County. Wills Creek, a tributary of the Muskingum River which joins the parent stream south of Conesville has a large watershed with many small streams draining into it. The rolling hills lie in unglaciated Ohio within the Allegheny Plateau province, underlain by Pennsylvanian age sandstones, shales, coal and limestone. The land surrounding the lake is both bottom-land and rolling hillside with good developments of oak forests and bottom-land timber. Rocky ravines, wildflowers, beaver and waterfowl are plentiful. Facilities are limited to the boat livery and a campground on SR 76.

Contact: Muskingum Watershed Conservancy District 1319 Third St., NW., New Philadelphia, Ohio 44663 Phone: (216) 343-6647

WOODBURY WILDLIFE AREA

Location: On SR 60, 4 miles South of Warsaw. 2,000 acres

This area is located in a hilly, unglaciated sandstone and shale region. In the territory several fine examples of mature and undisturbed native oak-hickory forest may be observed. Of special interest is a stand containing numerous large black walnut trees. Gray squirrels, ruffed grouse, deer, raccoon, and cottontail rabbit are common. Old hillside pastures are growing sassafras, dogwood, redbud, and hawthorn as a result of natural plant succession. Situated a few miles east of the glacial boundary the streams are deeply entrenched from the great flow of glacial meltwater. The hills on either side rise rather steeply to heights of 200 to 250 feet making the area beautifully scenic,

> Contact: Manager, Woodbury Wildlife Area Rt. 2, Warsaw, Ohio 43844 Phone: (614) 824-3362

CRAWFORD COUNTY

AMANN RESERVOIR

Located on SR 30 South at Co. Line Rd. 156 acres

A sizeable body of water surrounded by recreation ground and wildlife area has potential use for effective ecological studies. Hiking trails lead into the beech forest remnant where many kinds of shrubs, wildflowers and birds may be observed. Aquatic plants and animals may be studied on the lake shore.

> Contact: Service Director, City of Galion City Building 44833

Phone: (419) 468-1680



CRAWFORD-CUYAHOGA .

CRANBERRY TOWNSHIP BRICK ARCH

Location: 1/2 mile South and 1/2 mile West of New Washington. 80 acres

Of tremendous historical and geologic interest is this brick arch completed in 1892 as a drainage ditch for an extensive cranberry marsh. It is one of the three major outlets of the former marsh and is of interest also because of the engineering difficulties involved and solved in the construction. The four-foot tunnel or "arch" is over 1/2 mile long and made by cuts 25 feet deep. A surface ditch 12 feet deep remains over the tile. No other such drainage improvement exists in Ohio according to the Soil Conservation Service. Although the arch is in excellent condition after all these years, it is threatened somewhat by the roots of trees above, and the possibility of setting because of a dam constructed below the outlet to provide water for the village. The glaciation map shows the township was practically covered by temporary lakes formed when streams were blocked some 11,000 or more years ago by the glacial end moraine on the south and the ice on the north. The lakes gradually changed to marshes which, in turn, were drained by early settlers to create tillable fields. The Harrer farm is typical of those in the former marsh area.

> Contact: Mr. Herbert Harrer New Washington, Ohio 44854 Phone: (419) 492-3571

CRAWFORD NURSERY

Location: 5-1/2 miles SW. of Galion. 20 acres

This property provides an opportunity for classes to study the planting and propagation of ornamental plants.

> Contact: Manager, Crawford Nursery, Inc. Route 4, Bucyrus, Ohio Phone: (419) 562-1135

KAPLE SAW MILL

Location: 2 miles North of Shiloh, on Co. Line Rd. 35 acres

A completely automated saw mill processes logs by debarking and sawing into lumber. Slabs and edgings are ground into chips for paper mills.

> Contact: John Kaple 331 East Main Street New Washington, Ohio 44854 Phone: (419) 492-4082

CUYAHOGA COUNTY

CLEVELAND METROPOLITAN PARK DISTRICT

Encircling Greater Cleveland like a garland of green the Park System with its more than 17,500 acres in 10 major reservations and four connecting parkways provides a variety of outdoor education experiences as well as pleasure. The physical environment has many features of interest in earth science, particularly the rock formations and stream pattern. The flora and fauna of river, lake, flood plain, swamp, hillsides, upland and rock cliffs are preserved in as natural a situation as possible in view of the fact that as many as

14 million people use the areas annually. Advance reservations are necessary in order to secure the services available. The park areas are described in more detail as they form an east-west "emerald" chain around the city. For all reservations contact:

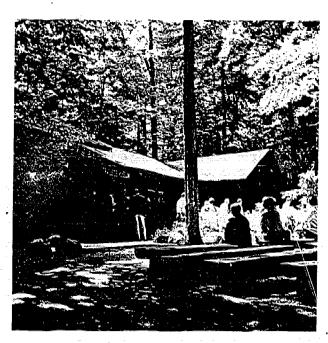
> Cleveland Metropolitan Park District 2048 Standard Building Cleveland, Ohio 44113 Phone: (216) 621-1054

> > For Girl Scout Areas contact:
> > Camp Registrar
> > Lake Erie Girl Scout Council
> > 1001 Huron Road
> > Cleveland, Ohio 44115
> > Phone: (216) 241-3180

Euclid Creek

Location: Along Glen Ridge Rd, and Euclid Creek from U.S. 6 South to Anderson Rd. 351 acres

A narrow valley about four miles long dissected by a fast flowing stream provides the physical environment for this park. Good exposures of the Mississippian shales and sandstone as well as the older shales of Devonian age are revealed in the slopes. The area is forested with mixed hardwood trees and some relic northern species. Wildflowers as well as trees, shrubs and evidences of small animals may be seen from the trails.



North Chagrin Reservation

Location: East of SR 91 and South of U.S. 6. 1,719 acres

The northeast link of the "Emerald Necklace" around Cleveland is situated along the Chagrin River. The river has dissected the shales and sandstones to form rugged topography. The "green" is provided by a mature beech-maple



climax forest. Williams Memorial Forest, a wildflower trail, a labeled nature trail and a trailside museum are significant features. Sunset Pond and tributaries draining into the river provide water habitat for plants and animals. A nearby waterfowl sanctuary has observation platforms to view resident and migratory birds. Long, and short trails, numerous picnic places and shelters are additional conveniences for field trips. A resident naturalist is available to assist teachers in interpreting all phases of the environment to classes. A Girl Scout cabin, Intergrove, sleeps 30 persons and has cooking facilities. This may be used by study groups during the week in spring and fall.

South Chagrin Reservation

Location: Near Chagrin Falls East of SR 91, West of Chagrin River. 614 acres

This property contains a segment of the river and its valley with exposures of Mississippian age sandstones and shales, flood plain, alluvial deposits and other geologic features. Such intriguing spots as Table and Squaw Rock and Sulphur Spring connote items of interest. The Cleveland Natural Science Lodge and museum and an arboretum are additional advantages to this site.

Bedford Reservation Tinker's Creek Gorge

Location: Along SR 14, Egbert Rd. and Tinker's Creek. 1,335 acres

A spectacular portion of Cleveland's "Emerald Necklace" is found in this park. Geologically, the gorge embraces the type locality for the Bedford shale and Berea sandstone of Mississippian period lying above the Devonian shale. Deep erosion by Tinker's Creek since glaciation is responsible for the scenic topography. A mature beech forest with sugarmaple, the oaks, hickory and ash in association is found on the upland. Yellow birch, hemlock and mountain maple grow transitionally in the flood plain valley or north facing slopes. Several picnic areas, a Girl Scout Camp, foot paths, bridle paths, and park roadways provide access and facilities for study of many habitats.

A Girl Scout cabin providing sleeping facilities for 26 persons and cooking facilities may be rented during the week, spring or fall, by nature study classes.

Brecksville Reservation

Location: East of U.S. 21, South of SR 82, West of Cuyahoga River near Brecksville. 2,500 acres

The vegetation on this preserve provides good examples of oak-hickory, beech-maple and hemlock glacial relic forest types. The Harriett Keeler Memorial Woods is in the northwest section. Geology field trips are often led in this area because of the rock exposures. From top to bottom are 20 feet of the Mississippian age Berea sandstone, 65 feet of

Bedford shale, 25 feet of Cleveland shale containing giant armored fish fragments, and 12 feet of the Chagrin shale where fossils are abundant. A trailside museum, labeled Nature Trail, and the services of a naturalist guide are available, the latter by appointment.

A Girl Scout Camp which has a dormitory sleeping 28 persons and a ledge for 20 persons, each containing food services facilities, may be rented during the week in spring and fall months by nature study groups.

Big Creek

Location: A ribbon along U.S. Rt. 42 (Pearl Rd.) to Snow Rd. 380 acres

This narrow strip of parkland extends along a tributary of the Cuyahoga River. The stream has eroded through the upper Devonian Cleveland shale and there is a good exposure available for study. Upland trees are the beech-maple forest type. Many shrubs and wildflowers are found in association. Although this is a relatively new site, hiking trails have been developed and facilities are available.

Rocky River Reservation

Location: From Detroit Ave. in Lakewood through Fairview, Brookpark, Berea and Strongsville South to Egerton Rd. 5.395 acres

A long ribbon, a mile or more wide, extends for several miles along the river to form the western portion of Cleveland's "Emerald Necklace" embracing over 5000 acres of valley and hillside. Geologically interesting are the good exposures of the Devonian age Cleveland shale, the flood plains, alluvial deposits, typical erosion patterns of the shale and the fossil fish horizon. Forest associations include original remnants of swamp, beech-maple and mixed hardwood types. Small ponds, a lagoon and the meandering river furnish habitat for aquatic plants and animals. Of historical interest is the site of Erie Indian fortifications, a mill and mill race. A resident naturalist and a trailside museum, a nature and a special wildflower trail, and many picnic spots make this a desirable site for visitation. Old Fort Hill cabin and a shelter are available for day hikes only, reservations made through the Girl Scout Office camp registrar. Wintergreen Cabin, also under Girl Scout jurisdiction, which sleeps 24 persons and has food service facilities, may be rented by nature study groups.

Bradley Woods

Location: Between Center Ridge and Lorain Rds. Entrance on Bradley Rd. 751 acres

Situated near the Lorain County line, this park is a western extension of the Emerald Necklace. Perhaps the outstanding ecological features are the extensive swampland which has standing water well into summer in a wet season and the stream dissection exposing the Berea sandstone of early Mississippian age. This is a good site for the study of birds and wildflowers, swamp forest and aquatic animals.



CUYAHOGA-DARKE

Huntington Reservation

See Lake Erie Junior Nature & Science Center.

INDEPENDENCE SCHOOLS LAND LABORATORY

Location: In City of Independence in the Cuyahoga River Valley. 35 acres

The acquisition of a relatively undisturbed natural area has been the cause of an exciting new project in a highly industrialized and urbanized community. Located in the river valley the property contains outcrops of Devonian shales and Mississippian sandstones and shales. Flood plain vegetation, good field succession areas in various stages, mixed hardwood forest on upland slopes, wildflowers, and small animals provide an abundance of material for ecologic study programs. Two miles of trails have been developed, one which leads to an excellent overlook of the Cuyahoga Valley and Canal. Activity in the Land Lab has included field biology and ecology courses for secondary students and an outdoor education program for elementary children. Community involvement has been an objective and adults as well as children are recognizing and appreciating the new instructional facility. Interested persons are invited to visit by appointment. Parking and a classroom are available near the site.

> Contact: Mr. William Taylor, Director Land Lab Project Independence High School 6111 Archwood Road Independence, Ohio 44131 Phone: (216) 524-4124

Mr. George Mirka, Curriculum Coordinator Land Lab Project

LAKE ERIE JUNIOR NATURE AND SCIENCE CENTER

Location: Huntington Park Reservation, 28728 Wold Rd., Bay Village, (Cleveland). 105 acres

A unique outdoor nature center showing living things in their natural habitats is the significant feature of this area. Nature trails along lake, streams, in meadows, and woods show the remarkable wildflowers, the oak forest association of trees, many planted exotic trees, wild animals, and numerous kinds of birds.

There are conservation exhibits of outstanding value, constructed as "a result of the conviction that a child's curiosity is a precious thing". A planetarium, a curator's workshop, and classroom facilities complete the appointments.

The director is so effective in introducing children to their natural environment that five school districts use her program as a supplement to school science classes. The Center is in the Huntington Park Reservation of the Cleveland Metropolitan Park District.

Contact: Director, Lake Erie Junior Nature and Science Center 28728 Wolf Road, Bay Village, Ohio 44140 Phone: (216) 871-2900

NORTH ROYALTON LAND LABORATORY

Location: East of High School parking area.

A convenient hillside affords an opportunity for the study of natural succession by the students of this school. The lower part of the slope is a field environment gradually developing into a shrub area of hawthorns. Higher up a young forest of pin oak, dogwood and quaking aspen is coming in. The edge of the forest near the top contains basswood, oaks, red maple with sugar maple and beech appearing. On the upland is the climax beech-maple forest typical of the area. Visitation is limited to junior and senior high school classes preferably from March to November.

Contact: Charles Gibson 7792 Tilby North Royalton, Ohio 44133 Phone: (216) 237-8800

SHAKER HEIGHTS REGIONAL NATURE CENTER

Location: On boundary of Cleveland Heights and Shaker Heights. 275 acres

With this large acreage devoted to nature study many types of habitats are available. These include lake, streams, field, marsh, and ravine. The ravine has good rock exposures of shale and sandstone of Mississippian age. The area has a variety of trees and flowers, both natural and introduced. The animal population is varied. The property is surrounded by a suburban area, thus limiting the large mammal population, but birds are abundant. Over 160 varieties have been sighted. This is the location of the former North Union Shaker Colony and some remnants of early Shaker construction remain. An interpretive guide is available on week days for school groups.

Contact: Shaker Lakes Regional Nature Center 2600 South Park Blvd, Shaker Heights, Ohio 44120 Phone: (216) 321-5935

WARRENSVILLE HEIGHTS LAND LABORATORY

Location: Across from Senior High School. 16 acres

Sixteen acres comprise the outdoor study area for this school. A beech-maple climax forest, a transitional mixed hardwood forest, and a meadow in natural succession vegetation are reached by developed hiking trails. A second area of 8 acres is presently being used for elementary gardening. Classes may visit on weekdays only.

Contact: Land Lab Director Warrensville Heights Senior High 4270 Northfield Road Cleveland, Ohio 44128

DARKE COUNTY

DARKE COUNTY WILDLIFE AREA

Location: 6 miles East of Greenville on SR 76. 315 acres

This area is situated in a productive agriculture area where glaciation is reflected in the slightly rolling recessional mo-



raine and the heavy glacial neutral soils and glacial boulders. Seven ponds of 21 acres provide many species of fish and other aquatic plants and animals for study. The property is managed for farm game species of pheasant, quail, rabbit and fox squirrels. Oak and hickory forest type is found in the small woodland plots.

Contact: Division of Wildlife District 5 Office Rt. 3, Xenia, Ohio 45385 Phone: (513) 372-7668

SPORTS HAVEN

Location: 3 miles South of New Madison off SR 121 92 acres

With advance notice club members of the association conserving this plot for wildlife will take classes along trails. Signs of glaciation may be found in the rolling recessional moraine topography and boulder train deposits. A small lake, abandoned cropland in a middle stage of natural succession and beech woodland provide a variety of habitat for plants and animals.

Contact: Darke County Fish & Game Association Frances Shank, President Rt. 2, New Madison, Ohio Phone: (513) 996-5600

WAYNE LAKES

Located 6 miles SW. of Greenville on SR 121. 465 acres

Due to the foresight of the president of a company which began removing glacial sands and gravel in the early 1920's, a desirable recreation and housing area has been developed. The excavation process left 14 lakes ranging in size from 5 to 13 acres, totally about 100 acres. The steep banks were leveled and trees were planted. The area is now owned by a corporation which sells lots for homes or cottages. In addition to studying the early physical features which are glacial kames and eskers, and the conservation practices, groups may observe water plants and animals, plantations and natural woodland. For free tour arrangements contact:

Lowell Victor, Manager Wayne Lakes, Inc. Rt. 1, Greenville, Ohio 45331 Phone: (513) 548-3807

DEFIANCE COUNTY

CAMP FORT DEFIANCE

Location: 6 miles NW, of Defiance off SR 15. 5 acres

This small property is adjacent to the Oxbow Lake Wildlife Area. In addition to its own woodland, the diversified terrestrial and aquatic wildlife indigenous to that area may be studied from the camp. A winterized lodge with food service facilities for 16 persons is available. Use of the two properties for study purposes necessitates advance registration each time.

> Contact: Camp Registrar Maumee Valley Girl Scouts 2313 Madison Avenue Toledo, Ohio 43624 Phone: (419) 243-8216

CAMP EDWARD DRUMMOND LIBBEY

Location: 4-1/2 miles East of Defiance on SR 281, 150 acres

This Girl Scout resident camp is located on the Maumee River across from Independence Dam State Park. Originally a farm, there is some natural growth of trees of the oak-hickory forest type especially in ravines which have never been cut. Many kinds of conifers, particularly white and Austrian pine, and tulip-tree have been planted, achieving considerable growth in their 20-30 years. One trail leads around the camp giving access to the study of wildflowers and animal life, soils and stream action. A winterized lodge housing 40 persons is a recent facility. School camping or day field trips during school time are feasible.

Contact: Camp Registrar Maumee Valley Girl Scout Council 2313 Madison Ave. Toledo, Ohio 43624 Phone: (419) 243-8216

FIVE MILE CREEK ACCESS

Location: 5 miles South of Defiance on SR 111. 5 acres

This small area provides access to the power dam backwaters of the Auglaize River. A limited number of wildlife plantings include multiflora rose have been established. A few trees are present, some of the fruit variety. The adjacent Auglaize River contains a varied fish population. Birds are present and during spring and fall migration waterfowl may be observed on the river. These are wood ducks, mallards, black ducks, scaup, blue and snow geese, and Canada geese.

Contact: Division of Wildlife District 2 Office 952 Lima Ave. Findlay, Ohio 45840 Phone: (419) 422-6757

INDEPENDENCE DAM STATE PARK

Location: 5 miles NE. of Defiance on SR 424. 321 acres

A narrow strip of land five miles long lying between the Maumee River and the highway constitutes this park area. A hiking trail traverses the old tow path of the Miami-Erie Canal, paralleling the river. One of the canal gates has been restored to its original condition. Of additional historic interest is the fact that "Mad" Anthony Wayne traveled this park on his famous march north, and the location of the Battle of Fallen Timbers is on up the river. Most of the vegetation reflects the water environment with sycamore, oaks, elm and willow predominating.

Contact: Manager, Independence Dam State Park Rt. 4, Defiance, Ohio 43512 Phone: (419) 784-3263



OXBOW LAKE WILDLIFF REA

Location: On SR 15, 5 miles NW, of Defiance. 313 acres

Situated in the Big Swamp area of Ohio which was formerly glacial lake bed, the area contains diversified terrestrial and aquatic habitats. Two ponds have been stocked with a wide variety of fish. In large Lake Oxbow aquatic vegetation in the form of potamogetons, coontail, myrioplyllum, elodea, cattails and rushes are present. Moderately extensive marsh areas contain standing trees as well as typical marsh plants. Associated aquatic animal species such as frogs, turtles, snakes and insects are abundant. Terrestrial cover ranges from cropland to grassland to woodland. These contribute to upland game including quail, pheasants, rabbit and perhaps some Hungarian partridge. The wooded area supports good fox squirrel, ground squirrel, raccoon and deer populations. Different types of wildlife plantings may be observed including autumn olive, multiflora rose and evergreens which provide habitat for many kinds of birds.

> Contact: Division of Wildlife District 2 Office 952 Lima Avenue Findlay, Ohio 45840 Phone: (419) 422-6757

SHAWNEE SCOUT RESERVATION

Location: Camp Lakota and Camp Neil Armstrong, both 2 miles South of Defiance, on SR 66.
650 acres

Although this large property is near town, the woodlands give a feeling of remoteness and privacy. The Auglaize River borders the camps on the west; Powell Creek, a tributary, runs through it; a 40 acre lake lies in the center. These provide both ample study of stream erosional and depositional features and adequate plant and animal life. The trees are oak-hickory forest type with a large number of pin oaks. In addition, pine plantations and transplanted hardwood provide protection for many varieties of wildflowers, edible plants, and wildlife. Eleven deer were seen at one time. The bird population is outstanding; it includes upland pheasants and quail with waterfowl in the lake area.

A new primitive camp adjacent to Camp Lakota, to be known as Camp Neil Armstrong who was an eagle scout here, is being developed. Meechaway Lodge and a new winterized training center at Lakota make this site a possibility for school camping.

Contact: Scout Executive Shawnee Council, Boy Scouts of America 2375 Allentown Road, Lima, Ohio 45807 Phone: (419) 299-2811

THE TREE FARM

Located 6 miles East of Defiance on SR 281 on left hand side of road.
78 acres

This property has many varieties of trees in the mature beech maple forest association with a rich assortment of wildflowers and animal life typical of the area. Situated on glacial till plains near the great swamp province, the soils are rich in clay. A stream runs through the property revealing the unsorted glacial deposit in its banks and the abundant flora as it flows into the Maumee River on the north edge. The owner operates a maple sugar camp in March, weather permitting. No facilities are available, parking must be on side of road, and owner indicates no liability.

> Contact: Mrs. E.H. Greenler Rt. 6. Defiance, Ohio 43512 Phone: (419) 395-1560

DELAWARE COUNTY

BERKSHIRE LAKE

Located on Co. Rd. 33 81 acres

A private campground, this property has the advantage of twenty acres of a mature, mixed hardwood forest which can be explored easily. In addition to hickory, beech, maple, wild cherry and walnut trees, spring flowers and small wild animals may be observed. A five acre lake provides access to the study of aquatic plants and animals as well as natural succession from wetlands to climax forest.

Contact: Lerkshire Lake, Inc.

Dake, Inc

Galena, Ohio 43021 Phone: (614) 966-9931

or

(614) 228-5611 Ext. 461

BLUE LIMESTONE PARK

Located off West William Street, West of Elizabeth Street.
16 acres

This is a small city park designed for recreation. A few oaks are scattered throughout. Water filled limestone quarries, no longer permitted for swimming, have little vegetation or other life. However one significant feature makes the park interesting for study. A fracture in the rock strata, known as a "fault" shows a displacement of the sides relative to one another parallel to the fracture. This fault is in the southwest corner of the park and can be traced by means of a cherty, nodular layer of rock which has been broken. This can be seen on the wall to the right of the fracture about six feet above the same layer on the left. Rubble partially obscures the fault.

Contact: City Manager City Bldg., Delaware, Ohio 43015 Phone: (614) 362-4354

CAMP GREENWOOD LAKE

Located on SR 42 East of Delaware. 87 acres

This beautiful site on a winding 16 acre lake has been used by the Salvation Army for 42 years yet has much to offer for outdoor education purposes. The lake was created by the confinement of a small stream between the highway and a railroad embankment after the stream had cut through the Ohio shale to form a fairly steep sided ravine. Many large oaks of the oak-hickory climax forest remain in a park-like area. A wooded section contains 80 different species of trees and many spring wildflowers. Birds and other small animals are seen. There are many cottages, a dining lodge, and large recreational lodge for summer use primarily.

Contact: City Commander, Salvation Army 138 East State Street Columbus, Ohio 43215 Phone: (614) 221-6561



CAMP LAZARUS

Located on U.S. 23, 1 mile South of Delaware. 300 acres

This large Boy Scout Reservation has a multitude of advantages for the study of geology, zoology, botany and their interrelatedness. The buildings are situated on a glacial till plain above the Olentangy River but rugged topography has been formed in the erosion of shale and limestone rocks by a small tributary of the river. The cliffs and steep hillsides are Ohio shale, a cabonaceous, thin-bedded formation of Devonian age. The shale is further characterized by "ironstone" or more correctly, dolomitic concretions, which occur in the basal part of the formation. The contact between the Ohio shale and the Olentangy shale occurs at the foot of the hillside. On down the valley outcrops of the Delaware limestone are exposed and create a picturesque little waterfall. Glacial erratics, which are large rocks carried down in the glacial material, are evident in the stream bed.

The property is almost all wooded; the top level with large oaks, beech and maple; the lower levels contain hackberry, hazel, cork elm, sycamore, and numerous other species of trees typical of flood plain or low lying terraces. Bird species are many, as well as typical wildflowers. The stream and two impounded lakes furnish ample aquatic environment. Two training lodges, a large dining facility and a large rustic lodge provide good space for school camping groups. Though the main camp grounds has been used extensively for forty years the site has tremendous potential for outdoor education.

Contact: Central Ohio Council, Boy Scouts of America 1428 East Broad Street Columbus, Ohio 43215 Phone: (614) 253-5513

DELAWARE QUARRY

Located on Smothers Rd., East of Westerville, North of Hoover Dam, 30 acres

This small plant and quarry is a good site for observing the Bedford shale of early Mississippian geologic age and the process for converting it into bricks. A large piece of quarrying machinery, called a shale planer, is used to cut off a section 35 feet in depth. This includes a swath of the upper red layer and one of the blue layer at the bottom with variable coloration in between. Due to the shrinkage properties of the red shale a wide swath is necessary to get a desirable mixture. The material is then transported to the plant where it is ground into a fine dust mixed with water and pressed into bricks. Sand and oxides are added for color. Groups of 30 or less may be taken through the plant at one time.

Contact: Manager, Delaware Clay Co. Smothers Rd., Delaware, Ohio 43015 Phone: (614) 363-1315

DELAWARE STATE PARK

Located East of SR 23, North of Delaware. 7,378 acres

A large earth fill dam has created a reservoir of approximately 1,330 acres. The large acreage of parkland adjacent

is mostly old field habitat with scattered beech-maple wooded areas. Many spots are undeveloped and afford good wildlife study areas. It is known as an excellent waterfowl and upland game region. Recommended for use from April to October.

Contact: Manager, Delaware State Park

Rt. 1

Delaware, Ohio 43015 Phone: (614) 369-2761

DELAWARE WILDLIFE AREA

Location: 8 miles North of Delaware and East of U.S. 23. 7.600 acres

Considerable acreage east of the reservoir is retained for the protection of many kinds of wildlife. The numerous ponds and marshes are an attraction for waterfowl during spring and fall migration. Nesting on the property are mallards, bluewing teal and wood duck. Shore birds such as woodcock, snipe and rail are frequently seen. Other inhabitants of the site are pheasant, quail, rabbits, fox squirrels, and deer in limited numbers. Aquatic plants and animals are numerous and accessible for study. Many woodlots are interspersed among the bodies of water, the well drained areas containing oak-hickory forest type and the typical spring wildflowers. Miles of osage orange and multiflora rose serve as field dividers and bird habitat. This is an excellent place to observe conservation practices for soil, water, woodlot and wildlife.

Tours may be arranged through:

Delaware Peservoir Wildlife Manager Rt. 1 Ashley, Ohio 43003 Phone: (614) 747-2922

OLENTANGY CAVERNS

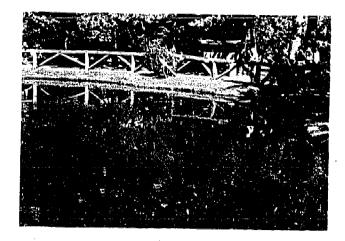
Location: 9 miles North of Columbus, 3 miles West of U.S. 23 on Home Rd. 91 acres

For a study of the geologic forces which form underground caverns in limestone strata, for a glimpse of Indian history made at the scene of the cave, and for the observation of plant and animal life associated with a practically unspoiled woodland of mixed hardwood, this site is advantageous. The cave was formed by the percolation of the slightly acid ground water as it found its way down through the cracks and crevices of the limestone, gradually enlarging them during the millions of years since the rocks were deposited. Four levels of the enlarged horizontal bedding planes are known. Visitors have access to three of these levels, 55, 75, and 105 feet below the surface of the ground. Early evidence indicated that the Wyandotte Indians used these caverns for refuge from weather and enemies. Open only on Saturdays and Sundays during spring and fall months. Special rates for school groups.

> Contact: Olentangy Caverns Rt. 4 Home Road Delaware, Ohio 43015 Phone: (614) 548-2165



ERIE COUNTY



THE BLUE HOLE

Location: North Washington St., Castalia. 10 acres

The "Blue Hole of Castalia" is famous throughout the country because of its beauty and seemingly bottomless depth. Although its source is usually termed "an underground river", geologic study indicates that it is spring, its source the rainfall and drainage of more than 100 square miles, for the most part lying south of Castalia. This southern region is higher in elevation so that, as the rain water drains into surface sinkholes, small cracks and joints, it produces a network of solution channels in the limestone. With many thousand of these moving north, eventually the springs, geared to lower land beyond come to the surface. Nearly two million gallons of water per day come welling to the ground level to create the unusual pool. The water contains no air and fish cannot live in it until it splashes over rocks and waterfalls, picking up the life-giving oxygen. A mill pond nearby is stocked with trout.

Of great interest also in Castalia is a 12 acre pond in the middle of town which does not freeze over during the winter because of the steady flow of water from underground. Waterfowl become incredibly numerous when nearby waters freeze over. Admission is free to children under 12 years.

Contact: Manager, the Blue Hole Castalia, Ohio 44824 Phone: (419) 684-5303

CAMP TIMBERLANE

Location: On County Line Green Road near Birmingham. 284 acres

This Girl Scout property is a T-shaped piece of land with the east fork of the Vermilion River flowing throughout from southwest to northeast. The northern section is relatively flat farmland now in natural succession vegetation; the southern section has rolling topography, is considerably wooded with beech-maple forest type and ash, black walnut, and red elm in association. The stream has eroded through the Mississippian sandstone, exposures of which may be found in its banks. A multiflora rose hedge provides cover for the bird population. Deer may be seen as well as smaller wild-life. Wildflowers grow in the woodland and may be observed

from the developed trails, A five-acre pond is rich in aquatic flora and fauna. Three winterized lodges, one housing 24 persons, one housing 36 persons, and the third, 12 persons, are available. A fourth winterized building housing 36 persons is planned. Adirondack shelters and tent units may be used when weather permits.

Contact: Camp Registrar, Eric Shores GS Council 42639 North Ridge Rd., Lorain, Ohio 44055 Phone: (216) 324-6104 — Elyria (216) 233-6112 — Lorain

ERIE COUNTY 4-H CAMP

Location: On Kelleys Island 21 acres

A small acreage provides a tremendous opportunity for campers to study a variety of trees and shrubs, early spring wildflowers, many features of geology or earth science related to limestone formations, fossils of Devonian age, glacial grooves, shore action and weathering. An abundance of animals include pheasant, waterfowl, tern, raccoon, fox, snakes, turtles, fish and snails. An Audubon group has recorded 70 different kinds of birds. At the present time the camp is scheduled for use from June 1 to September 1 which includes 4-H clubs, one school camping class and band camps. Recognizing the exciting potential for outdoor education, other schools may wish to investigate its availability. Transportation is by ferry from Sandusky or Marblehead. The camp is open only to prescheduled organizations.

Contact: Manager, Erie County 4-H Camp, Inc. 1200 Sycamore Line Sandusky, Ohio 44870 Phone: (216) 626-9440

INSCRIPTION ROCK AND GLACIAL GROOVES

Location: On Kelleys Island adjacent to the State Park.

1 acre

An exposed layer of the Columbus limestone at the northwest corner of the island showing glacial grooves gouged out by the advancing ice sheet has been saved in perpetuity by the Ohio Historical Society. On the south shore, Inscription Rock is preserved under a shelter so future generations may see the unique pictographs carved on the limestone boulder by prehistoric inhabitants, Facilities are available in the state park.

> Contact: Joseph Feyedelen, Mgr. Kelleys Island, Ohio 43438

KELLEYS ISLAND STATE PARK

Location: In Lake Erie about 10 miles from mainland, 590 acres

An exciting field trip to this park begins with a ferry ride from Sandusky or Marblehead. The area lies on the north shore and includes an excellent sand beach where water movement and shore vegetation may be observed. Primary woody plants are in the hackberry-elm association, with some scrub trees, old fields and small marsh areas for study of plants and animals. Without a doubt the outstanding feature of the island is geologic in significance. Glacial grooves cut by an advancing glacier a mile in thickness are as deep as a man is tall. These were gouged out by the hard igneous rocks plucked from the Canadian granites and other hard rocks to the north. Imbedded in the ice, their sharp edges scraped across the softer sedimentary limestones of Devonian



age to form the grooves. Much of the park is covered by limestone quarries, abandoned long ago and now returning to native vegetation. There is much room for hiking, exploring, and collecting the fossils typical of the Columbus limestone.

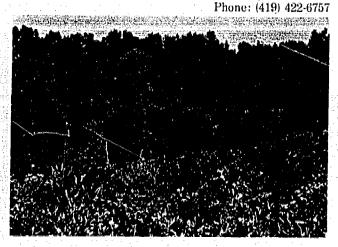
Contact: Manager, Kelleys Island State Park 4049 East Moores Dock Road Port Clinton, Ohio 43452

MILAN WILDLIFE AREA

Location: On SR 113, 3 miles West of Milan, 296 acres

The Huron River bisects the area with approximately one mile of the river within the boundaries. In places the river has eroded perpendicular shale cliffs from 6 to 60 feet in height. Over 200 acres are woodland, the primary tree species being red and white oak, hickory, cottonwood, ash, maple and walnut. Animals include fox, red and flying squirrels, raccoon, rabbit, opossum and woodchucks. Wood duck nest in trees along the river and occasionally a pileated woodpecker is seen.

Contact: Division of Wildlife District 2 Office 952 Lima Avenue Findlay, Ohio 45840



RESTHAVEN WILDLIFE AREA

Location: On West edge of Castalia, West side of SR 269, 2,210 acres

Resthaven is mostly in permanent grass and shrubby cover, some woodland and crop rotation. More than half has been stripmined for marl. The area lies in what was originally a wet marl prairie underlain by the clays of an ancient Lake Erie. About 322 acres of ponds have been developed for rearing large fish populations. A great variety of waterfowl are to be found on them during spring and fall migrations. Wood ducks, mallards, black duck and bluewing teal nest on the area. Woodcock nest also and large numbers of migrants are present occasionally in the fall. Of interest also are the many remnant prairie plants; big and little bluestem, Indian grass and prairie dock, relies of the vegetation present when the state was new. Pheasants, quail, muskrats and other fur species are present also.

Contact: Manager, Resthaven Wildlife Area P.O. Box 155 Castalia, Ohio 44824 Phone: (419) 684-5049

SHELDON'S FOLLY

Location: Old Cedar Point Roadway 64 acres

A managed woodland, a sand beach on Lake Erie, a water-fowl refuge pond, and natural marshes make this property a sanctuary of considerable renown. Cultivated fields, a tree farm section, multiflora rose hedge and a farm pond have been man's contribution to its beauty and attractiveness to wildlife, particularly birds. In addition to the woodland of oak, hickory, ash, sassafras and black walnut, approximately 8,000 hardwood and softwood seedlings have been planted. This extensive variety of habitat furnishes nesting sites and migration cover for a great number of waterfowl and other birds. Though privately owned, the property is visited by schools, scout troops and college classes on a regular basis at no cost.

Contact: Mr. D. E. Sheldon, Jr. 402 Northampton Court Huron, Ohio 44839 Phone: (419) 433-3116

FAIRFIELD COUNTY

FAIRFIELD UNION LAND LABORATORY

Located on U.S. 22, 7 miles East of Lancaster 134 acres

A well designed program for outdoor education has been developed on a farm purchased for use by this high school. Forty-five acres are farmed by vocational agriculture students featuring contour and strip cropping on the rolling hills. An arboretum of 100 species, a natural wooded area of native hardwoods and wildlife plantings highlight forest conservation and production. Two ponds and an adjacent stream provide access to water for aquatic studies. Three trails have been established together with an outdoor classroom with tables and benches in the woods. The area is situated on glacial end moraine with some Mississippian age sandstones and shales exported in the wooded ravines. Nesting birds and wildflowers may be seen also. Part of the success of this growing program stems from the guidance of a Land Laboratory Council of citizens and school personnel.

Facilities are available in the school building. No picnicking is permitted. Use is restricted to school hours.

Contact: Superintendent Fairfield Union High School Rt. 5, Lancaster, Ohio 43130 Phone: (614) 536-7306

GENEVA HILLS COLUMBUS PRESBYTERY CENTER

Location: 7 miles South of Lancaster reached via U.S. 33, SE. and Co. Rds. 86 and 67 West. (Blue Valley Road) 250 acres

Situated on the west edge of the Hocking River Valley, this camp has many outstanding features for outdoor education purposes. Geologically it lies on end moraine with Black Hand sandstone cliffs. A creek and a necklace of 6 lakes provide studies in erosion and deposition as well as aquatic wildlife. Botanically the site is well endowed with numerous acres of woodland, most of it hardwoods of maple, oak, hickory, wild cherry, black birch, and ironwood with many shrub trees of dogwood, hazel, sassafras, rhododendron, laurel, mosses, and ferns in association. Wildflowers are abundant



FAIRFIELD-FAYETTE

and include trailing arbutus, orchids and spotted pipsissewa. Some of the woodland is native Virginia pine and some plantings consist of white and red pine. More than 60 species of birds are known as well as numerous small animals. A large winterized lodge contains food service and sleeping dormitories for 78. A frontier lodge and covered wagons provide quarters for as many more. The area is being utilized for school camp and training as well as Christian education programs. Field trips also can be exciting and educational.

Contact: Richard S. Beidler Rt. 4 1380 Blue Valley Road

Lancaster. Ohio 43130 Phone: (614) 746-8439 or 8512

GREENFIELD DAM AND WILDLIFE AREA

Location: Reached from U.S. 33, 4 miles North of Lancaster or from SR 158, 1 mile West of Dumontville.

46 acres

This small dam is a part of an upper Hocking Watershed Conservation program. The acreage associated with it is in field and woodland. The ecology of the lake is similar to that of a large farm pond. The wooded area is primarily oakhickory forest type.

Contact: Division of Wildlife District 1 Office 1500 Dublin Rd.

Columbus, Ohio 43212 Phone: (614) 469-3337

LANCASTER HIGH SCHOOL LAND LABORATORY

Located on Infirmary Rd. North of Fair Ave. 9 acres

Plans for an extensive arboretum are progressing as vocational horticulture students make spring and fall plantings of various kinds of trees on the school property. Over 250 trees have been planted primarily on the hillside west of the school. A greenhouse for student use is now under construction. Observable also is an old quarry of Black Hand sandstone across a creek on the east side of the high school.

Contact: Mr. Dee Mowry Lancaster High School 230 Infirmary Road Lancaster, Ohio 43130 Phone: (614) 653-4288

RISING PARK AND MOUNT PLEASANT

Location: East of SR 188, North High St., Lancaster. 75 acres

This is a park of unusual scenic beauty with its ponds, trees and particularly a high hill with a cliff exposure of the Black Hand sandstone formation. A nature trail leads up to the top of the hill, known as Mt. Pleasant, at a moderate slope. Large trees of oak-hickory, beech-maple association as well as an abundance of shrubs, ferns and wildflowers provide a rich vegetation for study. A large glacial erratic near the top indicates that the glacier reached that point. Geologists recognize the glacial boundary as being only a few miles south of Lancaster. Chips of flint are found on the knob giving plausible evidence to the possibility that this was an Indian campsite, perhaps as Indians returned from Flint Ridge with their supply of material. The view at the cliff overlooks the broad Hocking River valley.

Contact: Park Superintendent 203 East Fair Avenue Lancaster, Ohio 43130 Phone: (614) 653-0418

ROCK MILL DAM WILDLIFE AREA

Location: 2 miles North of SR 188, NW. of Lancaster. 83 acres

A twenty acre lake recently formed by damming the upper part of the Hocking River makes good fishing and aquatic plant and animal study. Upstream is a wooded area, an old grist mill built in 1824 and a covered bridge. From the roadside near the bridge the eyes of the initiated can read an exciting geologic story. The narrow rocky gorge above the bridge, which becomes so narrow just below that a man could hop across it, was caused by a large volume of water draining a glacial lake. In cutting through the upper and more resistant part of the Black Hand sandstone the water formed the narrow gorge. A little below the bridge the valley widens and falls into a huge pot hole. This was formed in the less resistant part of the sandstone as the heavy flow of water carrying sand and pebbles was caught in a whirlpool motion. Liverwort, mosses and polypody fern growing on the rock indicate a consistently cool, moist environment. Private property prevents exploration of the old mill which has been used as a barn since 1906 as well as the river banks beyond

Lake studies may be arranged through:

Division of Wildlife..District 1 Office 1500 Dublin Rd. Columbus, Ohio 43212 Phone (614) 469-3337

TARLTON CROSS MOUND

Located on SR 159, 1 mile North of Tarlton. 16 acres

This area has been set aside to preserve for future generations an unusual Hopewell Indian mound constructed in the shape of a cross. A small park lies on one side of Salt Creek. A bridge and path beyond brings one to the mound and a wooded area containing mixed hardwoods and numerous shrubs. The stream which has cut through glacial till and Mississippian sandstone and shale is clean and sparkling. Creekside and forest studies are feasible.

For more information

Contact: The Ohio Historical Society Columbus, Ohio 43211

FAYETTE COUNTY

CAMP GIPIWA.

Location: On Zimmerman Rd. SW. of Washington C. H. 37 acres

Formerly farmland, this property is now used by Girl Scouts for day and troop camping. The topography is gently rolling; the site lies on Wisconsin glacial recessional moraine bordered on the west by Rattlesnake Creek, a tributary of Paint Creek. The rock beneath the glacial material is Silurian age Niagara dolomite but this is rarely exposed even at stream level. The mixed hardwood forest contains many species of trees, shrubs and wildflowers typical of neutral soils. Hiking trails have been developed giving access to many habitats. A remodeled farmhouse and a roof-tree shelter on the hilltop are available.

Contact: Camp Registrar Seal of Ohio Girl Scout Council 170 N. High St. Columbus, Ohio 43215 Phone: (614) 221-3291



CAMP PINE

Location: 5 miles SE, of Washington C, H, 17 acres

The Boy Scouts have earmarked this small piece of land along Sugar Creek, which flows into Paint Creek a short distance down stream, for primitive camping. For a study of flood plain vegetation including the trees which line the stream, glacial soils underlain by Niagara limestone, rocks and small animals in the stream bed, the site is adequate. Adirondack shelters are available at no cost.

Contact: Boy Scouts of America 1428 E. Broad St. Columbus, Ohio 43205 Phone: (614) 253-5513

FRANKLIN COUNTY

BOYER PARK

Located at the eastern terminus of Park St., in Westerville.

9 acres

Boyer Park, consists primarily of second growth elm, red maple, ash, and other trees. A good cattail marsh of about one acre contains muskrat lodges and other marsh plants and animals. School classes utilize the area to study forest and pond ecology. A self-guiding nature trail is maintained, the guides available at the Westerville city building.

Contact: City Building Westerville, Ohio 43081 Phone: (614) 882-2317

BROOKSIDE LAND LABORATORY

Located in Brookside Estates school grounds on the West edge of Linworth.

3 acres

A small acreage has been developed to provide numerous experiences for students using this area. A quarter acre pond was dug and its one to three foot banks naturalized with typical shoreline plants and aquatic life including fish, amphibians, snails, and insects. The surrounding land has a wide range of trees, shrubs, and herbaceous material for study. Remnants of the last glacier in the form of large igneous and metamorphic boulders tell part of the geological story. Instructional, informational and identifying signs are located throughout the area. A sketch map is available at the Tri-District Outdoor Education Office, 300 West Granville Road, Worthington, Ohio.

Contact: Principal Brookside School 6700 McVey Blvd. Worthington, Ohio 43085 Phone: (614) 889-1155

CAMP GAN MAHTOR

Location: On Hoover Reservoir. 28 acres

This day camp area is situated on land rich with wooded ravines, abandoned orchard and conifer plantations bordering Hoover Reservoir. An inlet provides access for water activities including the study of aquatic plants and animals. Spring wildflowers are abundant; more than 80 have been

identified. The bird population is excellent, especially during migration periods. Commendable are the conservation efforts which are represented in the 4000 conifers planted since 1950. A lodge is available for inclement weather.

Contact: Manager, Gan Mahtor The Jewish Center, 1125 College Avenue Columbus, Ohio 43205 Phone: (614) 231-2731

CAMP JOHNSON

Location: South of Camp Mary Orton, entrance marked on SR 23. 87 acres

Adjacent to Camp Mary Orton, this property contains a lodge and a deep, wooded ravine cut in the Ohio shale showing the characteristic jointing pattern and large concretions. Wildflowers in season, large trees, and small animals are abundant.

Contact: Godman Guild Association 321 W. Second Ave., Columbus, Ohio 43201 Phone: (614) 294-5339

CAMP MARY ORTON

Located on West side of U.S. 23, 2 miles North of Worthington; entrance at former roadside park.
76 acres

This is a camp with a natural environment well suited to outdoor education or nature hikes. The camp area containing fields where the buildings are located is bordered by wooded ravines. There is considerable frontage on the Olentangy River. The creeks, river, and woodland provide plant associations typical of beech-maple-ash forests, and abundant evidence of animal life. The geologic features include the contact of Olentangy shale and Ohio shale, steep rugged banks of thin-bedded Ohio shale showing a distinct jointing pattern, large "ironstone" (siderite or dolomite) concretions near stream level plus a classic example of stream piracy.

Contact: The Godman Guild Association 321 West Second Ave. Columbus, Ohio 43201 Phone: (614) 294-5339

CAMP SAINT RITA

Located 2 miles South of Groveport, on Groveport Pike.

This small area, heavily used as a day camp, retains a quiet charm and a considerable amount of little disturbed woodland along a small stream. Little Walnut Creek, as well as a smaller tributary, pass through the property, both down cutting through glacial deposits to form an interesting stream profile. Cut bank, flood plain, and terrace, typical of glacier-fed streams, may be observed. Many kinds of trees including cork elm, locust, large sycamores, hackberry, black walnut, box elder, oak, and maple are distributed over the property with concentration in thickets along the streams. Many birds are present and wildflowers are abundant in season.



FRANKLIN

The camp has a chapel, dining hall, and sleeping cabins. Adaptation for use as an outdoor education workshop is problematic. For a field trip of not too rugged proportions, it is an excellent site.

Contact: Education Director, Catholic Diocese 80 South Sixth Street, Columbus, Ohio 43215 Phone: (614) 228-2453

COLONIAL HILLS LAND LABORATORY

Located on the school ground at the South edge of Worthington on Greenwich Ave. 8 acres

A small stream has created a large east-west ravine on the school grounds. The plot contains some remnant trees of the original oak-hickory forest, particularly in the wooded ravine. Glacial erratics are found in the stream bed. Squirrels, raccoons, opossum, chipmunks, and a good variety of birds may be seen.

> Contact: Tri-District Outdoor Education Center 885 Evening Street, Worthington, Ohio 43085 Phone: (614) 885-6202

COLUMBUS CITY PARKS

A wide variety of activities and interest are represented at the 104 park sites contained within the city park system. These are on lands totaling over 9,300 acres. For recreation, these areas meet needs of million of people. Looking ahead, the system has purchased large acreages of land on the periphery of the highly urbanized city which will be developed in the future but which presently are noteworthy natural areas, and, hopefully, much of this quality will be retained with development. These and a few other parks have been selected on the basis of distribution and potential use for outdoor education purposes. For further information, contact:

Superintendent, Division of Parks and Forestry, City Building, Columbus, Ohio 43215 Phone: (614) 461-7342

Alum Creek Park

Located on Mock Rd. 1/2 mile West of Sunbury Rd., in NE. Columbus. 102 acres

This undeveloped park is quite desirable for nature field trips. Along a narrow trail east of the picnic area bordering Alum Creek, easy access to the creek permits study of plants and animals. Large oak, hickory, and wild cherry trees and many smaller woody plants may be seen from the trail, Following it south one encounters a small stream flowing into Alum Creek. Glacial till is exposed in its banks, erosion and depositional features may be observed as well as flood plain vegetation.

Big Run Park

Location: Entrance West of St. Stephen the Martyr School on Clime Rd, in West Columbus. 277 acres

This park area is one of the largest Columbus city parks; it extends through forest, stream, and old field succession.

A good stand of beech-maple and oak forest along the creek and on the hillside provides a good natural area for observing birds, squirrels, and many plants. An old trail goes up the hill and along the forest edge giving access for woodland studies. Recently developed, the park shows little encroachment.

Big Walnut Park

Located along Big Walnut Creek North of Livingston Ave. 77 acres

This city park has been reserved as a green island in a heavily populated urban district. The physical environment associated with a glacial stream provides a marsh habitat for over 120 species of birds as well as wild hyacinth and other water-associated plants. The flood plain level also contains an avenue of sycamores. Oak-hickory woodland with walnut trees on the eastern cut bank of the valley gives protection to small animals and plants. This has been the site used by The Ohio State University students for frog and bird study. Trails give access to both sides of the stream. Best use for groups is from May 1 through October.

Cherry Bottom Park

Located 3/4 mile North of Morse Rd. on the West side of Cherrybottom Rd. 94 acres

This small park contained approximately 50 acres in 1969. Plans for 1970 are to add 44 additional acres of wooded hill-side south of Big Walnut Creek and west and behind the water treatment plant. This 44 acres is nicely wooded along the bluff as well as in the bottom lands along the Creek.

The northern portion of the park, north of the Big Walnut Creek, is mostly floodplain and its anticipated use is for active recreation as well as boat launching in the pool backed up by the water plant dam.

Franklin Park

Located in East Columbus from 1500 to 1800 E.
Broad St., and South,
100 acres

Franklin Park is one of the oldest landmarks in Columbus, having served as the first Ohio State Fairgrounds for many years. It is also the site of the historic Veterans of the Civil War speech by General William Tecumsch Sherman. The park contains many recreational facilities and for the botanist or horticulturist there is a conservatory of exotic plants from many parts of the world. In addition, the park provides an opportunity to study a wide variety of trees, native and introduced, which include conifers, sweet gum, and oaks. Though located in the heart of the city, the park serves as an outdoor oasis for hundreds of children and adults in family groups, supervised day camp or recreational activities.

Glen Echo Park

Located at Parkview and Cliffside Dr., East of Indianola Ave., North of Hudson St., in North Columbus. 4 acres

This small city park lies in a ravine cut by a small stream in Ohio shale. Picturesque with its stone bridges and steep



slope, this little plot provides an opportunity to study shale strata, stream erosion, and deposition, glacial erratics, sulphur springs, vegetation, and squirrels. Segments of the hillside are wooded with beech-maple, oak, and cherry trees with sycamores at the flood plain level. It is an ecological study oasis in the heart of a crowded residential district.

Griggs Reservoir

Located on SR 33, NW. of Columbus, along the Scioto River. 558 acres

This extensive park area extends for a mile north of Griggs Dam, an early structure built to supply water for the City of Columbus. The river, the fossiliferous limestone rock exposures on its banks, the forest remnants and migrating waterfowl provide ample material for ecological studies. Facilities are available from May to October.

Hoover Dam and Reservoir

Located on Sunbury Rd., North of Central College, Ohio. 864 acres

This is a water supply source for the City of Columbus, the water being transported from the reservoir through a 48 inch pipe to a treatment plant at Morse Road and thence into Columbus water mains. The dam itself is mainly an earth filled structure with a central cement spillway. It has dammed Big Walnut Creek so that a lake 8-1/2 miles long has been created, with the surface at an elevation of 890 feet.

The public land surrounding the reservoir, some in Delaware County, provide opportunities for nature study and recreation as well as water supply. There are many sites for bird study, wildlife habitat, native Ohio trees, and other plants. Plans for future development indicate that wooded terrain near the lake will not be disturbed.

Olentangy Parkway

Located along the Olentangy River, Whetstone Park North to SR 161 at Worthington. 500 acres

This park development is intended to preserve the natural character of the land along the Olentangy River. The general area for nature study is to be located between the proposed Olentangy Freeway and the alignment of the Olentangy River east of this freeway.

There is a streamside access with many groupings of trees located along the natural course of the stream. Recreation development areas are planned at two locations; one just north of Henderson Road west of the proposed freeway and a second area located west of Olentangy River Road and Tangy Drive.

A 30-acre quarry lake located just east of Tangy Drive is included in the proposed development. Until recently this was the site of the Olen Gravel Pit.

O'Shaughnessy Reservoir

Located 12 miles NW, of Columbus on the Scioto River, 1.143 acres

The second of the dams built by the City of Columbus as a source of water. O'Shaughnessy has 829 acres of impounded water and over 300 acres in park land. Part of the area is still natural woodland with tree and flower study possible. Swamp habitats furnish plant and animal association of an hygrophytic nature. Below the dam, with due precaution, studies of the limestone strata, weathering, and fossils are feasible. Just north of the municipal zoo, which might prove to be of interest for a multipurpose field trip, is a wildlife refuge where many species of birds are looked for each spring by ardent birdwatchers.

Three Rivers Park

Located SE. of the intersection of Williams Rd. and 1-270. 390 acres

This is a new city park, basically undeveloped. Its main feature is the junction of three of the rivers that pass through Columbus, Alum Creek, Big Walnut Creek and Blacklick Creek. The area is low bottomland and is the scene of frequent flooding during spring high water. It is well wooded in the vicinity of the intersection of the streams and there is a woodland tract located on the bluff overlooking Blacklick Creek. Several small lakes are already on the site and the emphasis for this area is for light boating, fishing and an interconnected system of streams and lakes.

It is an ideal place for the study of the ecology of streams, aquatic and terrestrial plants and animals.

Whetstone Park

Location: Off North High Street in Columbus on Hollenback Drive west of 3500 block. 161 acres

Extending along the east side of the Olentangy River, Whetstone Park is excellent for the study of many facets of environments. The valley profile of the river shows the effect of glacial stream erosion with its cut banks, flood plain, terraces and deltaic deposits. Exposures of the carbonaceous Ohio shale bedrock may be studied. Wooded natural areas, wildlife plantings, many species of birds, hiking trails and access to the perennial and rose gardens give the area considerable advantage for a multipurpose field trip.

COLUMBUS METROPOLITAN PARKS

Authorized by law to conserve natural resources, the Columbus Metropolitan Park Board has purchased over 5000 acres of land for the enjoyment, education, and appreciation of the people in Franklin County. The parks are essentially forest preserves with outstanding scenic features in woodlands, streams, rock cliffs, and lakes. Recreational facilities are developed where there is no conflict in preserving the natural features and wildlife. A wide range of activity from passive recreation to more vigorous pursuits are possible; the most popular is hiking on forest trails. Though some sites have agency day camp areas, these are not overnight camping sites. The concern of the Park Board is that present use and enjoyment shall not jeopardize these natural areas for future generations.



FRANKLIN

The physical environments vary. All are on glaciated land dissected by streams to form interesting topography. The parks on the west show the influence of the high-lime content soils underlain by limestone and dolomite rock formations. Those on the east are on the western edge of the Allegheny Plateau and are underlain with sandstones and shales. All are somewhat different and their features are described separately. Accompaning charts indicate facilities available.

For information and reservations, contact:

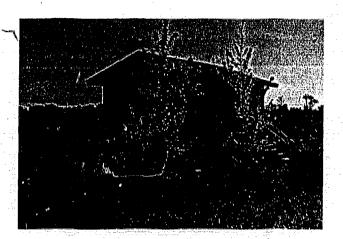
Columbus Metropolitan Park Board 1251 E. Broad St., Columbus, Ohio 43205 Phone: (614) 258-9575



Blacklick Woods Metropolitan Park

Located SE. of Columbus on Livingston Ave., between Brice Rd. and SR 256. 633 acres

Much of Blacklick Woods is a beech-maple and swamp forest, largely unspoiled. Blacklick Creek flows through a part of the park naving eroded through the shales and sand-stones and glacial soils. Many native wildflowers and shrubs may be studied as well as a great variety of birds and other animals. A live animal display with deer, raccoon, fox, and many other species is maintained. An interpretive center as well as naturalist services are available by advance arrangement. Recognized groups may reserve shelter for educational purposes by paying a service charge.



Blendon Woods Metropolitan Park

Located 10 miles East of Worthington, just beyond Big Walnut Creek on South side of SR 161. 577 acres

Blendon Woods is a large area of which most is wooded in beech-maple and oak-hickory forest association. It is largely unspoiled though used extensively the year round. Several ravines and small streams reveal shales and sandstones which underlie glacial soils. Native wildflowers in season are abundant as well as birds and small water and land animals. A new Walden Wildlife Refuge was established early in 1969 which gives visitors an opportunity to view free-flying ducks, geese, heron, shorebirds, and other wetland wildlife at close range in natural surroundings. Elevated observation shelters on the perimeter of a lake are provided for viewing without being seen. An interpretive center with displays and programs to assist school classes, scouting groups, garden clubs, and church organizations will be completed soon.

Darby Creek Metropolitan Park

Located on East side of Big Darby Creek on Koebel -Suydam Rd., off U.S. 40, about 6 miles West of Columbus City limits, 2 miles East of West Jefferson. 120 acres

Darby Creek, provides a wide variety of habitats for many forms of wildlife as well as a winterized lodge for educational purposes. Much of the area is wooded, primarily in an oak-hickory association. In addition it is highly valued for the native wildflowers and shrubs, a wide variety of birds, and trails leading to the water's edge. The soil is a neutral prairie type of glacial origin, underlain by dolomite which accounts for star grass and other prairie flower species in the upland areas:



Sharon Woods Metropolitan Park

Located just off Cleveland Ave. and Schrock Rd. 760 acres

A partially developed metropolitan park, Sharon Woods has proved to be popular in its first year in operation. Consisting of acres adjacent to I-71 north and I-270, the area is largely succession farmland and second growth woodland which has undergone considerable reforestation since its acquisition. Deciduous trees include pin oaks, red oaks, ash, maple, and sycamore; pine and spruce plantings and native species of trees and shrubs number secural hundred. A ten acre picnic area is now available for use. Hiking trails and nature study areas are still limited.



Willohaven

(Within Sharon Woods Metropolitan Park)

Located on Schrock Rd. 2 acres

A remodeled farmhouse may be used as a resident facility for conferences and meetings. Sleeping rooms with bunk beds, kitchen and dining facilities may be reserved for workshops by properly sponsored groups. No trails or natural areas are developed at the center.

FLINT RAVINE

Located on the NW. sector of the Pontifical College Josephinum property, North of Worthington. 40 acres

Flint Ravine, also known as Glen Mary Ravine, intersects SR 23 about one half mile north of 1-270 Interchange and extends generally so thwestward to the Olentangy River. The cut, exemplifying strong early erosion forces, exposes the two lowest levels of shale lying above the Delaware and Columbus limestones. The lower of these, a blue-gray, clay shale is known as the Olentangy, the next higher, a dark thin-bedded carboniferous formation, the Ohio shale. The latter formation contains pyrite and "ironstone" concretions particularly in the lower fifty feet. Indigenous trees, flowers, and shrubs are abundant including good examples of black walnut, beech, and several varieties of oak. Extensive reforestation is evident south of the ravine. The Josephinum property contains approximately forty acres of the original Glen Mary Ravine.

Contact: Rector, Pontifical College Josephinum Worthington, Ohio 43085 Phone: (614) 885-5585

GRANDVIEW HEIGHTS OUTDOOR EDUCATION AREA

Located on Goodale Blvd. at Grandview Ave. 10 acres

This small city park, half of which is on mowed, level ground and used as a play and picnic area, contains several wooded acres on a hillside. The hillside is a cut bank of the Scioto River connecting the flood plain to the terrace above. Marked trails provide access to a mixed hardwood tree study. A guide for these is available at the school library.

Contact: Principal, Robert Louis Stevenson Elementary School, 1065 Oxley Rd. Columbus, Ohio 43212 Phone: (614) 294-3155

INDIAN RUN RAVINE LAND LABORATORY

Located just off SR 161, back of Dublin (Washington Local) Schools.

9 acres

Indian Run Ravine is a small outdoor education area which contains many significant natural features. The geology is characterized by headward stream erosion with waterfalls, steep limestone walls containing a small solutional cave, underground stream in rainy season and fossils. The ravine shows stream deposition as well as erosion including a short "yazoo" or back wash area. Many native Ohio trees including large sycamores and a profusion of wildflowers, mosses,

ferns, lichen, fungi, and small water and land animals provide a choice study area. The trails are narrow and not too distinct requiring supervision for continued protection of plants as well as safety. Notebooks explaining the area may be procured for study prior to field trips.

> Contact: Manager, Indian Run Ravine Land Laboratory, Washington Local Schools Dublin, Ohio 43017 Phone: (614) 880-1232

INDIAN VILLAGE CAMP

Location: On West side of Scioto River near Griggs Dam. 8 acres

This site has long been used as a day camp for City of Columbus children. Situated on the banks of the Scioto River and containing a steep limestone rock ravine and stream, the property could well be used for earth science studies. An overlook of the Marble Cliff Quarries, two picturesque waterfalls, an adjacent mixed hardwood woodland with wildflowers, and small animals add to the study possibilities. Two winterized lodges are available as well as necessary facilities.

Contact: Columbus Recreation Department Room 124, City Hall Columbus, Ohio 43215 Phone: (614) 461-7410

JEWISH CENTER OUTDOOR AREA

Area lies between 1-70 and College Avenue. Entrance at Jewish Center. 50 acres

When interstate 70 was plotted, it was learned that it would create an isolated area on the west bank of Alum Creek. The north boundary of the "island" belonged to the Jewish Center who arranged to lease the entire area for a token fee. Two lakes with safe shorelines and a natural amphitheater were developed from the freeway borrow pits. Now a bridge, an arboretum, nature trails, and trees bordering the mile of frontage on Alum Creek all make this 50 acres of previously inaccessible land and a good day camp site, a bird sanctuary and wildlife refuge. May through October are designated as the months most desirable for programs.

Contact: Manager, The Jewish Center 1125 College Ave. Columbus, Ohio 43209 Phone: (614) 231-2731

MARBLECLIFF QUARRIES

Entrance South on Trabue Road, West of the Scioto River bridge. 1,000 acres

This operation covers many acres of land which provide valuable geologic and ecologic study as a result of the process of quarrying limestone. Because of the active quarrying and precipitous cliffs it is available only to special groups by permission.

The Columbus limestone, a Paleozoic formation deposited in warm interior seas during the Devonian period of geologic history, has about 40 feet of exposure within the quarry. Economically this is one of the important limestones of the state, being used for flux, buildings, ballast, roads, concrete,



lime, fertilizer and in the manufacture of glass. The formation is evenly bedded, strong, occasionally crystalline, ranging in color from buff to blue, the former predominating. A "bone bed" made up of fragments of fish is found near the top of the formation marking a change in the environment of the sea in which they were deposited. Below the bone bed the formation is very fossiliferous containing an abundance of corals, bryozoa, brachiopods and trilobites. Above the bone bed is the Columbus-Delaware limestone contact and a few thin beds of brown shaly material of that formation.

Permission must be obtained to enter the premises.

Contact: Mr. Leonard, Trabue Road Quarry Marblecliff Quarries, Inc., Cols., Ohio Phone: 488-3030

PRAIRIE LINCOLN LAND LABORATORY

Location: Back of school at New Rome north of U.S. #40 on Amesbury Way 7 acres

This small plot is an oak-luckory woodland with paths developed for finding typical trees and wildflowers and shrubs. No stream is available for aquatic studies. Benches are provided for class discussion. Visits are limited to school hours.

Contact: Principal, Prairie Lincoln School 4900 Amesbury Way Columbus, Ohio 43228 Phone: (614) 878-4403

ST. TIMOTHY SCHOOL OUTDOOR EDUCATION AREA

Adjacent to church and school on west.

10 acres

This small area, hemmed in by housing on three sides, demonstrates the many uses for a suburban "green island". Turkey Run Ravine runs east and west through six acres of the church property showing exposures of Ohio shale and glacial boulders, together with normal stream erosion and depositional features. Part of the area is wooded with native Ohio trees, shrubs and wildflowers in spring. Several acres are natural field succession supplemented with the planting of a conservation packet of trees by students. Squirrels, pheasants, quail and other bird life are attracted to the area by winter feeding.

Contact: Principal, St. Timothy School 1070 Thomas Lane Columbus, Ohio 43220 Phone: 451-2671 or 451-0739

SHAWNEE BRANCH-MARBLECLIFF QUARRIES

Off SR 745, 1-1/2 miles North of Shawnee Hills on West side of Scioto River. 200 acres

A relatively small operation, this quarry is worked for limestone as are those belonging to the same company farther south on the river. The Columbus limestone is exposed, gray in color, with iron stains, and is highly fossiliferous. In addition to fossil collecting this is a good site for hunting evidences of glaciation in overburden, striae, and glacial till found in dissolved joints of the limestone.

Contact: Joseph Harper, Trabue Road Quarry Marblecliff Quarries, Inc. Columbus, Ohio Phone: (614) 486-5251

SOUTH BRANCH HOOVER "Y" PARK

Located in Hamilton Twp, between Lockbourne Rd. on the West,Bixby Road on East,entrance on Rohr Rd., the South boundary 68 acres

Only three miles from Columbus, this delightful property is operated by the South Side Branch YMCA as a nonprofit community service. It is divided into a camp and conference area for organized youth groups, and a picnic area. The three shelter houses in the picnic area are an income resource requiring substantial fees. The camp and conference area is encircled with lodges and sleeping cabins. A large athletic field is adjacent to the well-kept campus. A youth group of the Y operates Borror Observatory which contains a sizeable telescope for studies in astronomy. The campus, with large plantings of red and scotch pine, gingko, and other exotic trees, lies on a terrace above the flood plain of Big Walnut Creek. Rock is exposed in the ravine of a tributary stream while deltaic deposits and cut banks are a part of the typical glacial drainage river profile. Natural wooded areas border the streams providing habitat for small wild animals including many birds.

> Contact: Manager, South Branch Hoover "Y" Park 190 Southwood Ave., Columbus, Ohio 43207 Phone: (614) 444-2151

WORTHINGTON HIGH SCHOOL LAND LABORATORY

Located West of Worthington H.S. to the Olentangy River. 15 acres

One of the earliest outdoor education programs was begun on this plot many years ago. The physical environment, which includes the east bank of the Olentangy River, its cut bank and flood plain, terrace and upper till plain, plus a tributary flowing westerly into the river, provide many conditions for study. The ravine of the small stream is well wooded and contains wildflowers in season. A pine plantation of red and white pine was established 20 years ago and the trees are now about 25 feet high. Large sized shrubs, attractive to wildlife, are found in one area. A wildlife plant seed area and an arboretum of Ohio trees have been planted through the years by students. The enclosed and heated shelter furnishes office and services schools in Worthington, Westerville, and Grandview. Those wishing to observe its operation, contact:

Tri-District Outdoor Education Program 885 Evening St., Worthington, Ohio 43085 Phone: (614) 888-0357

WORTHINGWAY LAND LABORATORY

Located behind the school at 6625 Guyer St. in Worthington. 8 acres

This small plot is being developed in conjunction with the other Worthington school areas as part of the Tri-District Outdoor Education Program. A swale draining a small watershed has cut a small ravine with Ohio shale exposed. The swale contains calamus and cattails; the ravine a few large trees of black walnut, sycamore, and hackberry. There is evidence of rabbits, squirrels, chipmunks, raccoon, opossum and possibly muskrat and mink. Wildlife—attracting seedings have been planted.

Contact: Principal, Worthingway School 6625 Guyer St., Worthington, Ohio 43085 Phone: (614) 888-1330



FULTON COUNTY

CAMP PALMER

Location: Off SR 66 West on Co. Rd. MN 142 acres

4-H Clubs of 10 northwest Ohio counties have developed an attractive camp in the wooded portion of a farm. The land is gently rolling except for steep slopes in the wooded areas where the streams are eroding through the glacial till which varies in thickness but is as much as 100 feet thick in one place. There are some depressional areas but no year-round ponding. A portion of the land is being reforested. A kitchen and dining hall, a recreation building and cabin units for boys and girls constitute the living arrangements.

Contact: County Extension Agent, 4-H Key Building Wauseon, Ohio 43567 Phone: (419) 335-9071

FULTON POND WILDLIFE AREA

Location: 1-1/2 miles North of U.S. Alt. 20, 2 miles West of Swanton. 38 acres

This wildlife area contains a shallow pond 15 acres in size which has a large fish population. Associated aquatic organisms such as frogs (green and bull), turtles (snapper, painted, and musk), and snakes are present. Aquatic vegetation includes cattails, sagittaria, potamogetons, coontail, water milfoil, and others. Most of the land surrounding the pond is grassland with some oak and hickory woodland. Waterfowl use the area during spring and fall migration but nesting is limited.

Contact: Division of Wildlife, District 2 Office 952 Lima Avenue, Findlay, Ohio 45840 Phone: (419) 422-6757

HARRISON LAKE STATE PARK

Located South of U.S. 20 on Co. Rd. 26. 245 acres

Harrison Lake covering approximately 105 acres was formed by constructing a dam on Mill Creek. Vegetation is sparse, primarily open beech woods and old fields planted in young pines. At the shallow end of the lake typical marsh vegetation and animals may be observed. Visitation is recommended for April through October.

Contact: Manager, Harrison Lake State Park Rt. 1, Fayette, Ohio 43521 Phone: (419) 237-2295

MAUMEE STATE FOREST

Location: 3 miles West of Whitehouse on Co. Rd. B. 3.071 acres

This flat plain property of more than 3,000 acres lies in an old glacial lake bed known as "oak openings." The soil is sandy, the result of beach deposits on the shores of this ancient lake, and supports an elm-ash-maple forest type. The land was purchased in 1947 and since that time has had all open areas planted to pine plantations. Tributaries of Swan Creek, which joins the Maumee River in Toledo, wander

through the area providing a study of stream action in a flat region and the flora and fauna associated with streams and swampland. A good understory of wildflowers may be found in the old forests. Pheasant, squirrel and rabbit are present. A fire tower is available for demonstrating triangulation and fire fighting techniques. Fifteen miles of trails have been developed to give access to all parts of the land.

> Contact: Ranger, Maumee State Forest Rt. 1, Swanton, Ohio 43558 Phone: (419) 822-3052

GALLIA COUNTY

BOB EVANS FARMS

Location: 1/4 mile East of Rio Grande on SR 35. 1.100 acres

This extensive acreage is enclosed within Rio Grande College. Raccoon Creek and the state highway. The topography of the land ranges from nearly level to rough as a result of the millions of years of erosion which have maturely dissected the Permian age sandstones and shales. Though much land is in crops and pasture, woodlands of large white oaks, red oak, hickory and tulip may be explored. A small farm pond is bordered by a park.

The Evans Homestead was built in 1806 by settlers from Virginia and is still used by the family for a home. The farm and barns may be visited from June through October, the season limited because of mud conditions.

Contact: Manager. Bob Evans Farms Sausage Shop Rt. 2, Bidwell, Ohio 45614 Phone: (614) 245-5324

CAMP FRANCIS ASBURY

Location: 2 miles West of Rio Grande. 300 acres

This fairly extensive camp property has a wide variety of habitats for study. A three acre pond, streams in mature valleys with high hills topped with Permian age rock, some exposures of topical shale and sandstone, fields in natural succession and a large woodland area provide this variety. The ridge tops of the unglaciated Allegheny Plateau typically are mixed oak forest with hickory, sour gum, dogwood, sassafras and pines in the association; wildflowers and small animals are abundant.

Two winterized lodges with a capacity of 44 persons each with self contained kitchen facilities provide excellent facilities.

Contact: Manager, Camp Francis Asbury Dunzell Hoffman Rio Grande, Ohio 45674 Phone: (614) 245-5254

TYCOON LAKE WILDLIFE AREA

Location: On SR 554 NE, of Rio Grande. 684 acres

A small dam on a tributary of Raccoon Creek provides the natural environment for an abundance of wildlife. The area is situated in the maturely dissected Allegheny Plateau cutting through the Permian age shales and sandstones to the older rock formations of Pennsylvanian age. The topography is high, rolling hills and wide valleys. The impoundment



GALLIA-GEAUGA

brings various species of waterfowl during migration. A small marsh development has created habitat for rails, raccoon, muskrat, shorebirds, woodchucks, snipe and various species of amphibians. Bobwhite quail are abundant in and around the area. Beaver action may be observed and deer frequently seen.

Contact: Manager, Tycoon Lake Wildlife Area Rt. 2, Bidwell, Ohio 45614

Phone: (614) 245-5289

GEAUGA COUNTY

AQUILLA LAKE WILDLIFE AREA

Location: Off U.S. 322, 2 miles NW, of Claridon, 69 acres

A glacial kettle hole, a small lake formed by the melting of a large chunk of ice left by the wasting glacier, provides a 40 acre water habitat and swamp land. A variety of waterfowl may be seen in spring and fall months. Wood duck and mallards nest on the property. One or two pair of Canada geese have been known to nest in the marshy areas. Land access to the lake is a long sloping hillside consisting of about 20 acres. Sandstone bedrock outcrops on the north side. A previous owner sculptured an Indian head in the rock with the name "Chief Aquilla" inscribed below the figure. Boat rental and a concession are open during summer months.

Contact: Division of Wildlife District 3 Office 912 Portage Lakes Drive Akron, Ohio 44319 Phone: (216) 644-2293

AUBURN MARSH WILDLIFE AREA

Location: North of U.S. 422 at Auburn Center. 461 acres

This property lies in a shallow U-shaped valley with scattered knolls. These are characteristic of the glacial end moraine of the area. The soils are acid, poorly drained and waterlogged until late spring. A small, well developed beech-maple woods is on the property. No facilities are available except parking but the area is a short distance from the East Branch reservoir for Akron water supply where facilities are plentiful.

Contact: Division of Wildlife District 3 Office 912 Portage Lakes Drive Akron, Ohio 43319 Phone: (216) 644-2293

BIG CREEK PARK

Location: 3/4 mile North of Chardon on old SR 44, entrance on Robinson Rd. 570 acres

Big Creek, a short tributary of Grand River, meanders through this scenic park. The creek has eroded through the Pennsylvanian-Mississippian age sandstones and shales to form steep cliffs and spectacular rock outcrops. On the cliffs grow twelve different kinds of fern, club moss, liverwort and many other species of plants. The deep moist valley contains the hemlock trees of glacial relic vegetation. The surrounding upland area is rolling and wooded with deciduous trees and dense undergrowth in places. Several small lakes provide aquatic habitat. Nature trails have been established

and give access to the observation of a great variety and abundance of wildflowers. Deer, fox, beaver, many birds including waterfowl, in addition to small mammals, constitute the animal population. Primitive camping for special groups is available.

Contact: Manager, Geauga County Park Board 203 Main Street Chardon, Ohio 44024 Phone: (216) 285-2222, Ext. 61

THE BUCKEYE TRAIL

Location: Through East side of County, North to Lake County.

The Buckeye Trail proceeds on county roads through moderately rolling countryside, except where streams have dissected the terrain. This is the low-lime till soil region where the process of glaciation has resulted in deeply acid, poorly drained soils. Observation of plant relationships to this feature should prove very interesting. At places the change of the Pennsylvanian age rock formation to Mississippian strata can be seen. This is true at Big Creek Park (see description) where the Sharon conglomerate forms steep cliffs and spectacular outcrops. Nature Trails and facilities are available here. Trail maps and information about topographic maps may be obtained from:

The Buckeye Trail Association 913 Ohio Departments Building Columbus, Ohio 43215 Phone: (614) 469-3984

CAMP HO MITA KODA

Location: On Auburn Center Rd., South of Newbury. 85 acres

In this heavily forested area a camp for diabetic children has been developed. It is situated on the hummocky topography of glacial end moraine. Two small streams wander through the property. Wildflowers, birds and small mammals are found in the woodlands through which hiking trails have been developed. A large lodge and sleeping cabins, not winterized, are available. Field trips or school camping programs may be arranged.

Contact: Manager, George Cervenka 14040 Auburn Center Road Newbury, Ohio 44065 Phone: (216) 504-5125

EAST BRANCH RESERVOIR

Location: On SR 608 near junction with U.S. 322. Lake 420 acres

The East Branch Reservoir is the upper one of three which supply water for Akron from the East Branch of the Cuyahoga River. This is the segment of the watershed flowing southward due to glacial diversion before a gorge was cut through at Cuyahoga Falls to permit drainage into Lake Erie. This reservoir is surrounded by a farming community and beechmaple climax woods. Maple syrup operations may be observed. Glacial outwash deposits known as kames are nearby.

Contact: Manager, Akron City Water Works 65 South High Street Akron, Ohio 44308 Phone: (216) 375-2590



GEAUGA LAKE

Location: On SR 43, 4 miles South of Solon. 276 acres

This small lake lies in a glacial lake bed formed when a stream was blocked on the south by an end moraine and on the north by the wasting ice mass. "Geauga" is an Indian word meaning raccoon. These are reported to be abundant in the area. The lake has an amusement park adjacent to it but the lake itself, marsh areas with turtles, muskrat and waterfowl, and a variety of mixed hardwood trees offer study possibilities.

Contact: Manager; The Geauga Lake Park Box 392, Aurora, Ohio 44202 Phone: (216) 562-7131

HALLE PARK

Location: Near Burton, on SR 700. 300 acres

Woodland, marsh, and stream provide a variety of habitats for plants and animals on this property. The East Branch of the Cuyahoga River, which is fairly low in pollution at this point, runs through the property. The area lies on glacial lake deposits of silt and clay. The dining and recreation hall as well as sleeping cabins are not winterized but may be used from May through October. Hiking trails lead into the good wildlife woodland.

Contact: Manager of Halle Park Jewish Community Center of Cleveland 3505 Mayfield Road Cleveland, Ohio 44118 Phone: (216) 382-4000

HAMBDEN ORCHARD WILDLIFE AREA

Location: On SR 608, 3 miles South of Hambden. 841 acres

The name of this property refers to the 225 acres of abandoned orchard trees. Sandstone bedrock is reported to be close to the surface resulting in shallow, acid soils. The area is just south of the Defiance end moraine on thin glacial till plain and esker deposits. The dominant tree species are beech and maple with hickory, black walnut, and red oak. Deer, grouse, woodcock, squirrels, and rabbit are common. Woodcock use the area for nesting. Two small ponds provide fishing and encourage black, mallard, and wood duck to stop during migration. Warblers, too, frequent the area during this time. There is a great variety and abundance of wild-flowers. Wildlife management as well as soil and water conservation practices may be observed here. A roadside rest is available on U.S. 6 east of Hambden.

Contact: Division of Wildlife District 3 Office 912 Portage Lakes Drive Akron, Ohio 44319 Phone: (216) 644-2293

HIGHBROOK LODGE

Location: On Aquilla Rd., Chardon. 28 acres

This camp, established for blind children and adults, may be used during spring and fall months for field trips. Most of the property is woodland with beech-maple climax forest. Some very old chestnuts, five to six feet in diameter, are still standing. Good exposures of bedrock Sharon conglomerate as well as glacial boulders brought down from Canada may be seen along the streams. Hiking trails with guide wires have been established throughout the area.

Contact: Manager, Highbrook Lodge Cleveland Society for the Blind 1909 East 101st Street Cleveland, Ohio 44106 Phone: (216) 791-8118

LA DUE RESERVOIR

Location: On SR 422 and 44. 1200 acres of Lake

This extensive water supply lake is surrounded by farm and woodland of mixed hardwoods. The area lies in the Akron-Canton kame belt which are ridges composed of sorted glacial sands and gravels deposited by a stream within the wasting glacier. Waterfowl may be observed on the lake during spring and fall months. Good fishing is reported and rowboats and sailboats may be used. A camping site is in a sugar maple woods.

Contact: Manager, Akron City Water Works 65 S. High Street, Akron, Ohio 44308 Phone: (216) 375-2590

PUNDERSON STATE PARK

Location: On SR 87 West of Burton. 728 acres

This scenic property with an uncompleted Tudor Manor House was purchased in 1950 by the state and developed into an outstanding park. Punderson Lake, a natural glacial lake of 90 acres, is surrounded with the rolling topography characteristic of glacial end moraine. Its boggy margin is still quite wild. The forested part is predominately beechmaple with a variety of trees, shrubs and wildflowers in association. It is recognized as an excellent wildlife area. In addition to the lodge, cabins are available. A nature program is conducted in the summer months.

Contact: Manager, Punderson State Park Box 178, Newbury, Ohio 44065 Phone: (216) 564-2279

RED RAIDER CAMPS

Location: On SR 87, 1/2 mile East of SR 306. 300 acres

This delightfully natural area is already used 22 to 24 weeks per year for outdoor education. It is advantageously situated on the Chagrin River which has cut a deep valley through the Sharon conglomerate, a basal formation of Pennsylvanian age. The forest is beech-maple and associates, enough maple to keep a sugar bush in operation. General



GEAUGA-GREENE

areas of study include fresh water ecology, field and meadow ecology, geology, conservation, and pioneer history. A main lodge has two bunkrooms; two wings of the dining area, provide additional sleeping quarters. A second winterized wilding is used for activities. Hiking trails have been established which may be used for field trips as well as for school camping.

> Contact: Manager, Red Raider Camps, Inc. 20800 Almar Drive, Cleveland, Ohio 44122 Phone: (216) 561-0652

RICHARDS CAMP

Location: 1/4 Mile East of Thompson on SR 528. 50 acres

This camp adjacent to the township park, was designed for recreation. However, its 46 acres of woodland which include high cliffs carved in the Sharon conglomerate and many varieties of native wildflowers make it desirable for nature hikes. A small lake provides an environment for aquatic plants and animals including equisetum and amphibians. The beech-maple forest contains red, white, black, scarlet and pin oak. Found too are such trees as walnut, tulip, cucumber (magnolia acuminata), hemlock and white pine. Camp sites are in the wooded area near the scenic rock ledges.

Contact: Manger, Richards Camp 3686 Winchell Road, Thompson, Ohio 44122 Phone: (216) 752-2356

RIVER PARK

Location: On Hiram-Rapids Rd. 3 miles South of Burton. 50 acres

Park land along the upper part of the Cuyahoga River has been acquired recently. It contains an extensive swamp habitat which can be reached by boat from the park. Buttonbush and cattail stands contribute to its value as a nesting place for duck, bittern and Prothonotary warblers. Many migrating waterfowl and shorebirds may be observed.

> Contact: Director-Secretary Geauga County Park District 203 Main St., Chardon, Ohio 44024 Phone: (216) 285-2222 Ext. 61

ROSE FARM

Location: West of SR 306, on Pekin Rd. 90 acres

This former farm which practiced good conservation controls is now operated as a day camp. Most of the property is in grass. It has value for general outdoor education in soil conservation, woodland, and wildlife studies. Horses and ponies and a large recreation building with kitchen facilities are available.

Contact: Myron C, Rose Rose Farm 8636 Pekin Road, Novelty, Ohio 44072 Phone: (216) 338-4591

THOMPSON LEDGE PARK

Location: 1/4 mile East of SR 528 at Thompson Center. 31 acres

This area lies on the glaciated, rather hilly Allegheny Plateau on a high ridge. Outcrops of Sharon conglomerate are the outstanding feature. Remnants of a beech-maple and mixed oak forest with many other species in the association may be studied. Hiking trails lead through the scenic area. A silica sand processing plant is nearby.

Contact: Thompson Township Park Commissioners 6503 Madison Road, Thompson, Ohio 44086 Phone: (216) 298-3991

GREENE COUNTY

BEAVERCREEK SCHOOLS LAND LABORATORY

Location: 2940 Dayton-Xenia Rd. 46 acres

An area adjacent to the school is in the process of development for outdoor education purposes. Part is already woodland with mixed hardwood trees, some of which are typical of limestone soils. An understory of shrubs and wildflowers is particularly interesting in the spring prior to the trees coming into leaf. A school forest has been a project of students and teachers. For visitation, contact:

Director, Beavercreek Schools Land Laboratory 2940 Dayton-Xenia Road Xenia, Ohio 45385

BERGAMO CONFERENCE CENTER

Location: On Co. Line Rd. and Patterson Rd. 5 miles East of Dayton. 265 acres

Named after the Italian county where Pope John XXIII was born, this conference center offers its meeting rooms and facilities to all religious, educational and industrial groups. Handhewn stone walls resembling the simplicity of a western fort help express the purpose of the Center, namely to further individual and group renewal. Two beautiful buildings contain large conference rooms, small group discussion areas, a chapel, lounge, dining facilities and library. In addition to the buildings the property consists of farm and woodland. Situated on a glaciated area between the Mad River and the Little Miami watershed the topography is rugged where small streams have eroded through to the Ordovician limestones and shales. A larger portion is level.

Contact: Bergamo, 4100 Patterson Rd. Dayton, Ohio 45430 Phone: (513) 426-2363

CENTRAL STATE UNIVERSITY OUTDOOR EDUCATION AREA

Location: On U.S. 42 South of Campus. 68 acres

A developing program is well underway for students of the university to study land use in farming, conservation practices, recreation and human ecology or man's relationship to environment. The former farm lies on the Cuba end moraine of the Wisconsin glacier which makes gently roll-



ing topography. A small stream runs through the property. impounded to form a body of water for the study of aquatic plants and animals. A woodlot contains the oaks, hickories. walnut and maple trees typical of the area and provides shelter for wildflowers, birds and small mammals. Indian artifacts are found. Hiking trails, a farm house and barns are available.

> Contact: Manager, Outdoor Education Area Box 338, Central State University Wilberforce, Ohio Phone: (513) 376-6321

DAYTON-MONTGOMERY COUNTY PARKS

Huffman Reserve

Location: On SR 4 and 69, NE. of Dayton. 450 acres

One of the seven reserves maintained for public use, Huffman is one of two having a lake. Other physical features are the Mad River, its flood plain and upland forests. Exposures of Richmond limestone and shale of Ordovician age provide a mecca for fossil hunters. Aquatic plants and animals may be observed along the river. The lake attracts migrant waterfowl in March and November. This is a well manicured park with limited hiking trails. Contact the Dayton-Montgomery County Park District, address below.

Sugarcreek Reserve

Location: On Wilmington Pike, 1 mile South of SR 725. 550 acres

Glacial outwash, kame deposits and flood plains along Sugar Creek, a tributary of the Little Miami, give a variety of study possibilities at this site. Sugar Creek is reported to be polluted but of interest for aquatic study. Two smaller, unpolluted streams on the property provide a contrast. Meadows, shrublands, and second growth woodlands on the upland show natural succession on former farmland. These afford a seasonal display of wildflowers and a wide variety of birds and animal life. A few very old white oaks remain, reported to be 550 years old.

Groups may join the general public for interpretive "Green Mansion Walks".

Contact: Dayton-Montgomery County Park District 1375 East Siebenthaler Avenue Dayton, Ohio 45414 Phone: (513) 278-8231

GLEN HELEN NATURE PRESERVE AND OUTDOOR **EDUCATION AREA**

Location: Across Corry St. from Antioch Campus at Yellow Springs. 960 acres

Glen Helen is a living demonstration of geologic and ecologic processes and provides an outdoor laboratory and classroom at the doorstep of Antioch College. Yellow Spring Creek, a tributary of the Little Miami River, has incised itself deep into the dolomitic rock of the Silurian age, forming a steep sided valley rimmed by rock ledges. From these seep numerous springs around which ferns and other moisture-loving plants grow in profusion. At the upper end of

the ravine a spring has deposited a yellow travertine limestone mound projecting into the valley. The rocks in the valley yield a significant series of fossils as well as the scenic topography which includes the cascades, the result of the more resistant layers of the dolomite formations forming a shelf. The soil mantle supports a stand of old-growth hardwoods, primarily chinquapin oak, a neutral soil tree, white oak, bur oak, sugar maple, basswood and black walnut. The understory is largely redbud and spicebush with wildflowers of outstanding interest. The natural area, a National Natural Landmark, occupies about 250 acres of the larger tract. One hundred acres of upland plantation is managed by the Yellow Springs High School as a school forest, Hiking trails, a trailside museum and an outdoor education center which includes dining and sleeping facilities for classes and conferences are available. Visiting classes are asked to provide effective leadership in the ratio of one adult for ten children or student naturalists may be engaged at a cost.

> Contact: Director, Glen Helen Antioch College, Yellow Springs, Ohio 45387 Phone: (513) 767-7331 Ext. 421

GREENE COUNTY FISH AND GAME FARM

Location: 4 miles South of Xenia on Union Road. 130 acres

Two programs beyond their fishing and hunting interest receive priority with the members of this association. They are dedicated to conservation, particularly the preservation and propagation of nut trees, and to youth with whom they wish to share their interests. The farm under development contains two ponds, pine plantations, wildlife areas in grass and natural succession, a woodland containing many kinds of nut trees as well as the oaks, maples and ash. Some of those are reported to be over two hundred years old. In addition to the native walnuts and hickories there is a fine nut-tree nursery where varieties are being propagated to insure trees for posterity. The Club cooperates with the County Soil Conservation District and the school to sponsor an Agriculture Field Day in April of each year. A leaflet with tree identification and inventory for the nature trail is provided. A new, well-equipped club house is available. The Club welcomes all educational groups with adequate leadership.

> Contact: Manager, Greene Co. Fish and Game Association 107 W. Market Street, Xenia, Ohio Phone: (513) 372-6087 or 372-3517

GREENE COUNTY PARKS

Location: On old Rt. 35 at Spring Valley. 64 acres

One small park is situated along the Little Miami River giving access for boating and fishing. The other is an old gravel pit surrounded by 15 acres of woodland and 15 acres of pine plantation. The area lies in a region scoured by both the Illinoian and Wisconsin ice sheets which left thick deposits of outwash gravel in the valley. The larger site contains a winterized lodge.

> Contact: Greene County Park District Citizens National Bank Xenia, Ohio 45385



JOHN BRYAN STATE PARK

Location: On SR 370 East of Yellow Springs. 990 acres

The Little Miami River down-cutting through massive rock of uniform resistance is responsible for the scenic features of this park. The larger portion is in a valley whose profile has been widened by erosional forces. It is well forested with older hardwoods which include the oaks, sugar maple, basswood and black walnut. Within the cool moist ravine glacial relic vegetation persists and conversely prairie plants are found in typical habitats. Huge slump blocks of the Silurian age dolomites which are exposed on the valley walls, have fallen below, some to stream level. One of these, called Steamboat Rock, has vertical instead of horizontal bedding planes and provides a study in plant succession. The Glen Helen Nature Preserve is on the west side of the park. Clifton Gorge on the east. A park naturalist will assist teachers on nature walks and describe the historical aspects of the area. These include Clifton Mill, an operating grist mill of 100 years, the Horace Mann monument, the Glen Homestead and the Grinell Mill.

> Contact: Manager, John Bryan State Park Rt. 1, Box 74 Yellow Springs, Ohio 45387 Phone: (513) 767-1274

SPRING VALLEY WILDLIFE AREA

Location: East of U.S. 42, 2 miles South of Spring Valley. 841 acres

A very unique area along the Little Miami River provides a large amount of naturally wet marshland. A semi-natural 80 acre lake actracts a variety of waterfowl especially during migration. Wood duck nest on the site. Marshy areas, one of which is known as Sinclair Swamp, attract a number of unusual birds and provide a variety of aquatic vegetation. Sinclair Swamp has long been a favorite for bird students. Skunk cabbage appears early in the spring in another little swamp west of the railroad. There are in addition woodlands on the uplands primarily of the oak-hickory forest type. Hiking trails and facilities make this an excellent study or field trip area.

Contact: Manager, Spring Valley Wildlife Area Rt. #1, Waynesville, Ohio 45068 Phone: (513) 488-2530

GUERNSEY COUNTY

BUCKEYE TRAIL

Location: From Seneca Lake at roadside park to Piedmont Lake, 36 miles

This segment of the trail begins at the park near the dam and proceeds through back country on little used scenic roads over a part of the original Zane Trace to Old Washington. This is an old town of historic interest. It was one which was captured by Confederate General Morgan in his raid through Ohio. A monument commemorates a battle which was fought here with the Union cavalry under Colonel Shackleford. The trail continues north over little used township and county roads. It follows along the east edge of the new Salt Fork State Park. Wildlife in the area is abundant. In addition to the usual species, deer and grouse may be encountered. Many

ravines are wooded with a wide variety of trees typical of the region, some primarily beech-maple but more often oak-hickory associations. Road cuts and ravines reveal a series of Pennsylvanian age sandstones, shales and coal. Song birds are numerous. The Trail turns eastward beyond the Salt Fork Area through a countryside of beautiful hilltop views. It crosses several small streams which are well stocked with fish due to clean watershed. Island Creek Coal Company's Vail Mine is passed at the east edge of the county. This is a deep mine, using modern equipment which includes a unit train for hauling the coal. The trail ends at the boat dock on Piedmont Lake where good facilities are available.

Contact: Buckeye Trail Association 913 Ohio Departments Building 65 S, Front St. Columbus. Ohio 43215 Phone: (614) 469-3984

NATIONAL FISH HATCHERY

Location: 16 miles SE. of Cambridge below Seneca Lake Dam. 118.5 acres

The U.S. Department of Interior maintains these ponds and station to raise fish for stream and lake stock. During some seasons of the year various fish culture techniques can be demonstrated. Guided tours will be provided by appointment at which time descriptive leaflets may be obtained from the display in front of the office building. May through October are the months recommended for visitation.

Contact: Hatchery Manager National Fish Hatchery Senecaville, Ohio 43780 Phone: (614) 827-3341

ROLLING HILLS SCHOOL OUTDOOR EDUCATION AREA

Location: On SR 209, 1 mile South of Byesville. 154 acres

This school has a flourishing land laboratory planted in oats, corn and meadow with different varieties of these crops in each plot. A nursery project is under way with plantings of walnut, locust autumn olive, white pine and tulip trees. The common hardwoods together with gum, buckeye, pines and ferns constitute the school forest. Under development are a biological pond and an arboretum. Vegetable plots and flower gardens are recent experiments. Two nature trails lead students or visitors to the various habitats of plants and animals. The area may be visited in May or September as well as during the summer months.

Contact: Manager, Rolling Hills Outdoor Education Area Meadowbrook High School Rt. 1, Byesville, Ohio 43723 Phone: (614) 685-2313

SALT FORK STATE PARK

Location: East of I-77 on U.S. 22 20,279 acres

Recently established, this large area is a part of the Wills Creek Watershed which joins the Muskingum River south of Coshocton. The rocks exposed in the hillsides are Pennsylvanian age sandstones, shales, coal and limestone. This



is typical unglaciated Allegheny Plateau dissected to form rounded high hills and fairly wide valleys. The lake covers 2,952 acres of this valley section with terminal ravine areas in marshland. A considerable part of the land has been denuded for farming but is being returned to forest by natural succession and plantings. Wooded areas are dotted through the acreage, some oak-hickory forest type, or beech-maple with aspen. In the extensive camping sites recently developed are pine plantings in addition to the native woodland. Water areas harbor waterfowl in migration. The rather unusual horned larks are seen on the upland meadows.

A nature program is planned for the summer months. A lodge is under construction, a marina completed.

Contact: Manager, Salt Fork State Park Box 481, Cambridge, Ohio 43725 Phone: (614) 439-1826

HAMILTON COUNTY

THE BUCKEYE TRAIL

Location: From East part of Cincinnati, NE. to Little Miami River.

The Buckeye Trail, with its blue blazes traverses through city and suburban areas of Cincinnati. It is not until it reaches Camp Edgar Friedlander, that large acreages of woodlands and wildlife habitat are found. It travels along the northern boundary of this camp, thence on into Clermont county. (See description of Camp Edgar Friedlander). The human ecology of Hamilton County as it relates to the natural environment could be a stimulating study. For maps and further information, contact:

The Buckeye Trail Association 913 Ohio Departments Building Columbus, Ohio 43215 Phone: (614) 469-3984

CITY OF CINCINNATI PARK SYSTEM

Through the years over 3000 acres of land has been acquired and developed by the Cincinnati Board of Perk Commissioners. These are well distributed throughout the city and visited by many people yearly. Briefly described are seven parks which have special value for nature study. For reservations, trail guides and general information.

Contact: Superintendent Cincinnati Board of Park Commissioners 950 Eden Park Drive Cincinnati, Ohio 45202 Phone: (513) 961-6628

Ault Park: Located on East side at end of Observatory Avenue. 223 acres

Primarily these are formal gardens with modern and old fashioned roses, peonies, dahlias, and other annuals. However, a scenic overlook and a geology trail above the Little Miami which has eroded deeply into the dense Ordovician limestones and calcareous shales are significant. The area has wooded ridges and meadows, good habitats for studying both plants and animals.

Burnet Woods: In central part on Jefferson and Clifton Avenues, 88 acres

A trailside museum, a lake, nature trails through wooded hills and a supervising naturalist are highlights of this park. The nature museum is the center of activity.

Caldwell Park: On North Bend Road between Caldwell and Millcreek. 122 acres.

Given by J. Nelson Caldwell in 1926, this park is a very wild virgin woodland which has parking and hiking trails but no other development. It is reported to have been owned by only two persons since it was Indian territory. John Cleves Symes and the Caldwell family. The topography is extremely rugged and only the more adventuresome are advised to explore its paths. The main entrance is on Caldwell Road.

Eden Park: Location is along the Ohio, East on Eden Park Dr. off Gilbert Ave. 184 acres

This park features a conservatory, a natural history museum, an art museum, and houses the Historical Society. The conservatory makes six floral displays each year plus permanent tropical, desert and orchid displays. "Presidents Grove" contains a tree planted for each president, chosen by him or his heirs. An Ohio River Navigation Monument, a historical spring house, Ohio River scenic overlooks, floral gardens, two small lakes and a reflection pool are of interest. There are wooded areas; also, the Pop Harden Boy Scout Trail.

Hauck, Cornelius J., Botanic Garden (Sooty Acres): Located at Reading and Taft Rd. 8 acres

The Park Board has recently received as a gift, this estate with an outstanding collection of trees, shrubs, and flowers, Current operating budget is limited, but visitors are welcome.

Mt. Airy Forest: Located NW. on Colerain Avenue. 1500 acres

A veritable haven, this large acreage provides a wide ecologic setting for man and his natural environment. The forest was the first municipal reforestation project in the U.S., 700 acres in hardwoods, and 200 in conifers with special plant collections in a 120 acre arboretum. This forest park includes memorial plantings of azalea and rhododendron. More than 300 acres are native woodland and 14 miles of hiking trails have been developed throughout rugged hills and ravines. An Arboretum Educational Center, three party lodges, group and day camping areas and 23 major picnic areas add to the convenience of visitors. Charge is made for lodge reservations only.

Stanbery Park: Located in Mt. Washington at Oxford Ave. 78 acres

Native woods here are reported to be among the best in the country. Large beech, maple, tulip, cucumber magnolia and oak are dominant. A picturesque creek flows through a deep valley. The caretaker is also a naturalist.

HAMILTON COUNTY PARK DISTRICT

Designed to preserve forever in their natural state large portions of acquired lands, the Hamilton County Park District Commissioners are developing the 5,717 acres on that basis. Picnicking facilities, self-guiding nature trails of outstanding



HAMILTON

value, camping sites, golf courses, fishing lakes, and lodges have been developed at three sites. Shawnee Lookout park contains only parking, a marina, and hiking trails. Some of the outstanding features and programs are described for each unique park. Of special note is the fact that a credit course entitled "Field Studies in Natural History" is conducted each year in the parks in cooperation with the University of Cincinnati. The course is designed to serve teachers, amateur naturalists and camp leaders by acquainting them with the geology, flora, and fauna of the parks in a manner which can help them interpret these to classes. For reservations of facilities or a naturalist's services, for trail guides and further information about any park or the Field Studies course contact:

Naturalist, Hamilton County Park District 10245 Winton Road, Cincinnati, Ohio 45231

Miami Whitewater Forest

Location: In NE. part of county reached from Harrison Pike, Dry Fork Rd., and U.S. 128, 1,955 acres

Heavily forested natural woodlands, lakes formed by impounding "Dry Fork", scenic overlooks and Ordovician limestones and calcareous shales provide the physical environment of the Miami Whitewater Forest. The dense deciduous forest attracts many rare and unusual birds, and support a herd of whitetailed deer seen frequently by park visitors. The Bowles Woods area is the nearest approach to a virgin beech climax forest found in this part of Ohio. Portions of the park are known to have been frequented by prehistoric Indians. Morgan's Raiders camped here during their invasion of Ohio in the Civil War. Four youth camping sites, nature walks, self-guiding trails, and a lodge which may be reserved, are among the pleasing features of this park. Of particular delight is a trail to Reservoir Overlook which gives a panoramic view of parts of Ohio, Indiana, and Kentucky.

Sharon Woods

Location: On U.S. 42, North of junction with U.S. 25, South of I-275, 740 acres

The waterfalls of Sharon Creek, Sharon Lake, natural forests with wildflowers and flowering trees, and a gorge known nationally for its rare fossils combine to make this park beautiful and practically ideal for nature study. It abounds in prehistoric and pioneer history; an Indian Mound, Gypsy Hollow which was the campsite for annual gypsy visitations, and traces of mill race are mute evidences. Two youth camps for sponsored groups with adult leadership, adirondack shelters, a lodge, a deer pen, a museum, the services of a year-round naturalist and hiking trails are provided for the appreciation and convenience of all groups.

Shawnee Lookout

Location: In SW. corner of county on Brower and Lawrenceburg Rds. 1,010 acres

Situated near the axis of the famous Cincinnati Anticline or Arch, on the hillsides and in the valleys of two large glacier-fed rivers which cut deeply into the Ordovician limestones and calcareous shales, and covered with a thin veneer of Illinoian glacial till, this is a site of geologic magnificance. Quite understandable is the fact that it is the site, also, of

a fort built by prehistoric Indians 2.000 years ago and a lookout for tribes and war parties, the most recent being the Shawnees. The area overlooks the confluence of the Great Miami River and the Ohio River, the lowest spot in Ohio. Spectacular views are the reward of hikers who climb to the hilltops, particularly the one known as "the Point". The area abounds in wildlife, including a herd of whitetailed deer. The sanctuary along the Miami is a large acreage used as a nesting area for many species of waterfowl. The park is undeveloped except for a marina on the Miami River, Hikers must obtain permits from the Park District office and register with the Park District Ranger before entering the area,

Winton Woods

Location: A circle of land around the city of Greenhills. Reached by Winton Rd. on North or South U.S. 127. West of park. 2.012 acres

Situated on the hilltops and slopes of former pastures and eropland which are being reforested rapidly, this park has many good areas for study. Special geologic features called "sinkholes" are found at Sinkhole Knob. These are depressions formed on the surface of the ground as the underlying limestone dissolves and the surface rocks collapse. The area is underlain by hedrock of the Ordovician period of geologic age which may be explored for fossils where exposed by erosion. The lake and valley of the West Fork of Mill Creek is a flood control reservoir for the industrial plants. Guides for the excellent hiking trails are available. Three youth camping sites, family camping, boating and scheduled sight-seeing boats, picnicking, nature walks rotated in all three developed parks, as well as lectures and films may be experienced.

INDIAN HILL SCHOOLS OUTDOOR EDUCATION CENTER

Location: at Northern end of Given Rd., Village of Indian Hill.
40 acres

Although still under development, an exciting new program in outdoor education is well underway on this property. It borders the Little Miami River and Sycamore Creek in the well dissected Illinoian glacial ground moraine. Much is bottom land of sycamore, cottonwood, box elder, and maple. Some is playing field, weed patches, tall grass, and tulip tree plantation. The hillsides have a dense shrub vegetation. Along the river are islands, pools, exposures of fossiliferous ordovician limestones and shales, shallows, and rapids.

A large stone house has been renovated by students, teachers, and interested citizens to provide a base of operations. Classes studying pioneer life examine the hand-hewn beams, nine fireplaces, and dirt floored cellar which may be of prehistoric interest also. Future plans call for related activities in pioneer industries and history. Classes explore the basic habitats of field, stream, and woodland, collect fossils and work on service projects. Teacher workshops have generated considerable enthusiasm and good ideas. Field trips or training programs may be arranged.

Contact: Robert C. Terwillegar 723 Floral Avenue, Terrace Park, Ohio 45174 Phone: (513) 831-0147 School: Indian Hill Middle School 6100 Drake Road, Indian Hill, Cincinnati, Ohio 45243 Phone: (513) 561-8686



HAMILTON-HANCOCK-HARDIN-HARRISON

NEWTON FISH FARM

Location: South of SR 32 at Newton. 18.13 acres

. A good stop on a field trip might be this site where there are 21 rearing and holding ponds for a wide variety of fish. Fourteen ponds are used in rearing muskies, while seven ponds are utilized to hold fish for experimental and research purposes by the National Water Quality Laboratory for Fish which is located here. Of interest historically is the fact that the first block house in Anderson Township was erected in 1792 on the fish farm site.

Contact: Manager, Newton Fish Farm 3433 Church Street, Cincinnati, Ohio 45244 Phone: (513) 561-7336

SOIL CONSERVATION SERVICE FARM

Location: On Kemper Rd. 1/2 mile West of U.S. 127. 100 acres

Of interest here are the soil and water conservation practices demonstrated on a farm with 125 years of recorded yields and methods. The land is reported to be in the end moraine of early Wisconsin glaciation. Several soil type variations and topographical changes due to the effects of the glaciers and erosional forces may be observed. Glacial land forms recognized as kames and eskers, which are sand and gravel deposits associated with the glacial boundary and stream deposits within the glacier, may be examined on neighboring farms.

Contact: Soil Conservation Service 3220 W. Kemper Road, Cincinnati, Ohio 45239 Phone: (513) 892-4044

HANCOCK COUNTY

CAMP BEERY

Location: 6 miles South of Findlay, West of SR 68. 309 acres

A Boy Scout reservation, this site has a lake, a large creek, Ohio hardwoods of the beech-maple forest type, pine plantations, wildflowers and many birds and small mammals. Geologically the area is glacial till plain, the soils high lime Wisconsin till type, underlain by Silurian age Monroe dolomite; there is no evidence of rock except those transported by the glacier. A winterized lodge and hiking trails lend themselves possibly to school camping, certainly for field trips.

Contact: Scout Executive, Put-Han-En Council 2100 Broad Ave. Findlay, Ohio 45840 Phone: (419) 422-4356

VAN BUREN STATE PARK

Located off I-75 on SR 613. 138 acres

The impoundment of Rock Ford Creek provides a 70 acre lake which is surrounded for the most part by open park land. This is interspersed with some beech-maple woods. The area lies on the glaciated plain typical of northwest Ohio where thick clay till averaging 50 feet covers the bedrock. This consists of a light gray dolomite which is the Guelph

member of the Niagara formation of Silurian age. The resulting soils are known as high-lime till. Remnants of an old sand beach ridge, mapped as Lake Maumee, an early level of Lake Erie, are found in the vicinity. April through October are months most desirable to visit the park.

Contact: Manager, Van Buren State Park Box 117, Van Buren, Ohio 45889 Phone: (419) 299-3461

HARDIN COUNTY

MATSON RECREATION AREA

Location: On Co. Rd, 60, 1 mile North of SR 701.

This neat, attractive site contains 40 acres of woodland with a large number of native tree species. The forest extends from thin open areas to very dense ones, in all sizes from saplings to large mature trees. A one acre pond, swamp, and open park glades give a wide variety of habitats for birds and small mammals. Newly planted pines and shrubs provide additional shelter. Nature trails have been developed.

Contact: Manager, Matson Recreation Area Rt. 1, Dola, Ohio 45835 Phone: (419) 634-5217

HARRISON COUNTY

BAKER RIDGE NATURAL AREA

Location: 1 mile South of Jewett. 178 acres

The Jewett Sportsman Club has developed a coal stripping area into a wildlife reserve. The site contains two lakes and a large amount of woodland, some natural and some a result of reforestation. It provides habitat for birds, deer, rabbits and other small mammals native to Ohio. Groups with qualified and responsible adult leadership may seek permission to use this area. Facilities include a winterized lodge.

Contact: Clark Leeper, President Jewett Sportsman Club, Jewett, Ohio 43986 Phone: (614) 946-2385

THE BUCKEYE TRAIL

Location: From Piedmont Dam to Bowerston via Clendening and Tappan Lakes.

27 miles

A high ridge trail overlooking a countryside primarily in rolling farmland takes the sign of the blue blazes from Piedmont Dam to Lake Clendening. It leads along this lake shore for 2-1/2 miles than traverses across farms and woodland to Tappan Lake. The four miles along Tappan are in pine plantations, a part of the erosion control vegetation established soon after the construction of the flood control reservoir. North to Bowerston the countryside is similar except for a great dogwood and red-bud show of springtime flowers in the valleys. The whole trip on the trail is far beyond the area of glaciation but the streams may be slightly modified by glacial drainage. The region lies in Pennsylvanian age sandstones, shales and coal formations. Exposures of the Upper Freeport coal and sandstone, Lower Freeport, Clarion,



HARRISON

Ames limestone and Middle Kittaning coal (in the south part of county) may be observed.

Facilities are available at the dam sites and roadside parks. For further information contact:

Buckeye Trail Association 913 Ohio Departments Building Columbus, Ohio 43215 Phone: (614) 469-3984

CAMP TIPPECANOE

Location: Off SR 8 on North side of Lake Clendening. 850 acres

Situated on rolling and sometimes rugged terrain along the quiet lake, the campsite includes 200 acres of mixed hardwood forest and pine plantation, a creek, rock exposures of the Pennsylvanian series of sandstones, shales and coal, and fields in natural succession. Hiking trails or canoes may be used to reach nature study areas. Winterized lodge and heated cabins make year-round camping feasible. Four school systems conduct a school camping program at this site.

Contact: YMCA Camping Executive 405 2nd Street, NW. Canton, Ohio 44706 Phone: (614) 456-7141

CLENDENING LAKE

Location: On SR 8 East of Tippecanoe. Land -4.600 acres; Water -1.800 acres

A long narrow lake is the result of impounding the Brushy Fork branch of the Stillwater Creek. An earth dam 64 feet high and 950 feet long controls the drainage of 70 square miles. The Muskingum Conservancy lands are extensively forested with both old hardwood stands and new pine plantations and are dedicated by the District as a wilderness area. Considerable adjacent land is owned by scout and other youth groups which follow conservation principles creating a total wilderness area of approximately 20,000 acres.

Contact: Muskingum Watershed Conservancy District 1319 Third St., NW. New Philadelphia, Ohio 44663

FOSTER'S LAKE

Location: On SR 9, 1 mile West of Jewett. 70 acres

A ten acre lake and thirty acres of woodland are outstanding features of this private natural area. The site is near the headwaters of the Conotton Creek on the highly dissected Allegheny Plateau. Outcrops of Pennsylvanian age limestones and sandstones may be found in the ravines. Hiking trails, boats, and picnic facilities are available at no cost to school groups. A private airstrip, 1,600 feet long and a hangar facility are unusual features. This is an excellent site for field trips to study ecological subjects.

Contact: Foster Thomas Box 81 Jewett, Ohio 43986

HARRISON RECLAMATION AREA

Location: 3 miles South of Jewett, 1,321 acres

Extremely rugged topography with high walls of Pennsylvanian age sandstones, limestone, coal and shale and steep spoil banks are typical of this extensive acreage. Part of the land was stripped before the reclamation law was enacted and reflects the problems of erosion and acid mine water drainage. This and more recent strip mine land was purchased by the state in 1960 for the purpose of reclamation. Presently there is young growth of elm, ash and maple trees with rabbits and deer frequently seen. Development plans are progressing and the area eventually will be a good example of a recreation and nature study site.

Contact: Ranger, Jefferson Reclamation Area Rt. 1

> Bloomingdale, Ohio 43910 Phone: (614) 264-5671

SALLY BUFFALO PARK

Location: On SR 9, South of Cadiz. 408 acres

A reclamation area of the Hanna Coal Company, this park is provided for use by all who can enjoy and not destroy. It is named for the Sally Buffalo Creek which in turn was the name of the grist mill operated on that stream.

The vegetation on the strip-mined land is youthful but beginning to effect beauty and erosion control. Native sycamores, maple and oak are found distributed through the acreage. Small mammals and birds are present and waterfowl may be observed on the large lake during season migration.

Arrangements may be made with the company to have a tour of the area which would include a view of a large overburden removing shovel in operation, a rock wall with the Pennsylvania age sandstones, shales, coal seams, and limestone exposed. Of interest is a comparison of unstripped farmland with the reclamation area and the fields of crown vetch planted to restore soil fertility and feed livestock.

Contact: Superintendent of Reclamation and Land Use Hanna Coal Company, Cadiz, Ohio 43907 Phone: (614) 942-3116

SNOW BOWL SKI AREA

Location: Off SR 9 North of Cadiz. 327 acres

Although land was cleared to establish a ski run much of this property remains in a natural state. Heavily forested portions are in the mixed oak forest type with a lush display of wildflowers in the spring. Conifer plantings are extensive and the area abounds in beaver, muskrat, woodchucks, deer and smaller mammals. The area is well beyond the line of glaciation; the topography rounded high hills is typical of the highly dissected Allegheny Plateau in Ohio. The rocks exposed are the sandstone, shale, limestone and coal of Pennsylvanian age. Trails have been developed through the woodland; springs and streams provide water life. A modern day lodge may be reserved, cost to be negotiated.

Contact: Manager, Snow Bowl Ski Area 546 Grant St., Cadiz, Ohio 43907 Phone: (614) 942-2051



SUNNYDALE FARMS

Location: On the edge of Jewett. 300 acres

This farm situated on the high, rolling hills of eastern Ohio specialized in dairying. It is reported to have one of the highest producing herds in the state. Of note also are the conservation practices, the mixed oak woodlands with hiking trails, the farm pond, streams and rock exposures of Pennsylvanian age strata.

Contact: Horace and Bob Stewart Jewett, Ohio 43986 Phone: (614) 946-4291

TAPPAN LAKE

Location: On U.S. 250, 10 miles East of Denninson. Land -4,790 acres Water -2,350 acres

A substantial body of water with extensive lands surrounding it provides flood and drought control, recreation sites and scenic beauty. Tappan Dam is one of fifteen constructed in the Muskingum Watershed. Tappan was completed in 1936, one of the earliest ones; it is one of three impoundments on Little Stillwater Creek, a meandering tributary of the Tuscarawas River. It is an earthfill dam, 52 feet high and 1,550 feet long, its watershed 71 square miles. The area is beyond glaciation, in the maturely dissected hills underlain by the Pennsylvanian series of sandstones, shales, coal and limestone. The shores of the lake are heavily wooded and two islands add diversity in habitat. Great blue heron use the more shallow areas of the lake. Good camping facilities. cabin rentals and picnic spots are available at the park, the dam and at a roadside park. There are several miles of hiking trails including a segment of the Buckeye Trail.

> Contact: Manager, Tappan Lake Reservoir Box B-1 Deersville, ()hio 44693

HENRY COUNTY.

DRY CREEK ACCESS

Location: On U.S. 24, 1 mile West of Texas. 2 acres

This small plot is situated on lands of the abandoned Miami-Eric Canal. These in turn lie on the glaciated flat Lake Plain, an early level of an ancient Lake Eric. The site provides access to the Maumee River which contains a large fish population. Associated aquatic organisms may also be observed. Seasonally migrating waterfowl are present as well as limited numbers of upland game animals.

Contact: Division of Wildlife
District 2 Office
952 Lima Avenue
Findlay, Ohio 45840
Phone: (419) 422-6757

FLORIDA ACCESS

Location: On SR 424, 1 mile East of Florida, 4 acres

Upstream from Dry Creek Access near Napoleon, this site is on abandoned Miami-Eric canal-land and glaciated smooth Lake Plains. The Maumee River contains fish population of impounded stream water varieties such as bull-heads, carp, catfish and others. Migrating waterfowl may be observed in season. In the water habitat one may find frogs, turtles, snakes and insects,

Contact: Division of Wildlife District 2 Office 952 Lima Ave. Findlay, Ohio 45840 Phone; (419) 422-6757

MAUMEE RIVER PARKWAY

Location: North Turkey Foot area—downstream of Damascus Bridge on U.S. 24. 485 acres

A recent aquisition of land on the Maumee River, this area is agriculturally developed land bordered by oak-hickory woodland. North Turkey Foot Creek empties into the river here, providing easily accessible aquatic habitats for study. Both the river and the creek with their typical glacial stream valley profiles may be examined for cut banks, natural levees, alluvial flood plains and terraces. The streams have dissected the Lake Plains, a former Black Swamp province created by an early Lake Erie, the result of impounded glacial meltwater. The park is under the development.

Location: Missionary Island — in river across from Farnsworth Park, one of Toledo's Metropolitan Parks.

246 acres

This delightful spot is on a flood plain island resulting from the resistance to erosion of the dolomite which is exposed at the northern tip of the island. Flood plain vegetation in trees and flowers predominates. There are some outstanding chinquapin oaks and hackberry trees. Deer, mink and other small mammals abound. This was once the site of a large Ottawa Indian village and the first Protestant Mission school for Indian children. Park is still under development.

For further information contact:

Division of Parks & Recreation 913 Ohio Departments Building Columbus, Ohio 43215 Phone: (314) 469-3983

HIGHLAND COUNTY

BARRETT'S MILLS

Location: 2 miles South of Rainsboro and U.S. 50 East of Hillsboro. 80 acres

The restoration of an early water powered grist mill and pioneer village is being made by a private company. A covered bridge, woolen mill, blacksmith shop and country store are part of the restoration program. Barrett's Mills is situated at a waterfall on the Rocky Fork gorge. Foot trails lead through the narrow valley and along the dolomite cliffs.



HIGHLAND

Numerous large trees of the beech-maple forest type, an abundance of wildflowers typical of neutral soils and forest animals may be seen.

Months for visitation are April through October.

Contact: Manager, Barrett's Mills Box 235, Rainsboro, Ohio 45165 Phone: (513) 365-1418

THE BUCKEYE TRAIL

Location: From Caleb's Hill through New Market skirting the southern shore of Rocky Fork Lake to Carmel, then Cynthiana,

The Buckeye Trail travels through open farmland, most of it only slightly rolling. An exception is Caleb's Hill near Danville, a knob marking the Niagara Escarpment, a change in bedrock from the thin limestones and calcareous shales of Ordovician age to the more massive resistant, dolomite rocks of Silurian age. The topography becomes more rolling south of Hillsboro as the Trail skirts the southern shore of Rocky Fork Lake. Here facilities are available at the State Park. Open country continues to characterize the Trail as it proceeds eastward to Pike County where the land becomes more rugged. A topographic map index, trail maps, and further information may be obtained from:

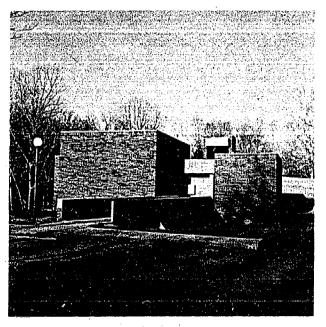
The Buckeye Trail Association 913 Ohio Departments Building Columbus, Ohio 43215 Phone: (614) 469-3984

FALLSVILLE WILDLIFE AREA

Location: On SR 73, 3 miles SE. of New Vienna. 1,211 acres

This extensive property lies in the terminal belt of early Wisconsin glacial drift. The topography is gently rolling to flat though dolomite hills of Silurian age rock rise to the south. A scenic waterfall located at a former mill site is a feature typical of the Niagara formation in many parts of the country. A spring, known as "Button Spring" seeps from a rock layer containing fossils. Fall Creek, a tributary of Clear Creek and subsequently Rocky Fork, runs through the area. Several small ponds provide habitat for fur species, fish, and waterfowl, especially during spring migration. Wooded areas are primarily oak, hickory, beech and walnut.

Contact: Manager, Fallsville Wildlife Area Rt. 1, New Vienna, Ohio 45159 Phone: (513) 987-3369



FORT HILL STATE MEMORIAL

Location: On SR 41, SE, of Hillsboro. 1,197 acres

Fort Hill contains one of the best preserved prehistoric Indian hilltop enclosures in the state. Equally important is the natural history of the area with its rock outcrops and its great variety of plant and animal life. Baker Fork, a tributary of Ohio Brush Creek, has formed a gorge west of the hill, exposing at the top the early Mississippian thin-bedded sandstones and shales used by the Indians to form the wall around their hilltop. This building of the stone and earthen wall was a major accomplishment for a people with only the most primitive tools. Though capped by the sandstone, outcrops of Ohio shale are found on the sides of the hill. A quarry and a road cut west of the bridge across Baker Fork afford a view of a section of Silurian dolomites.

The variety and abundance of plant and animal life is great because of the diversity of soils and terrain. The dolomite gorge at the base is rich in glacial relic vegetation such as Canadian yew, the Sullivantia, a northern plant all but exterminated by glaciation, and the walking fern. On the cliffs are found Walter's violet and Canby's mountain lover, a southern Appalachian plant. On the shales grow the rare Carolina pink. Canada violet and many familiar wildflowers are plentiful. Unusual birds as well as the more common ones may be heard during the nesting season. A new museum interpreting the natural and prehistoric features of the site is open 9:30 to 5 daily except Mondays, March to November.

For brochures and guides contact:

The Ohio Historical Society Columbus, Ohio 43211

OLDAKER WILDLIFE AREA

Location: On U.S. Rt. 50, 6 miles West of Hillsboro. 139 acres

Although the area is situated near the famous Niagara escarpment, the topography is quite modified by thick deposits of weathered Illinoian glacial till. In places this is



HOCKING COUNTY

cemented with limestone to form a rock tillite.

The property is managed to maintain game and fur species of animals. Among these are rabbit, quail, woodchuck, raccoon, muskrat, fox and gray squirrel, skunk and opossum. Three ponds provide habitat for fur species, fish and other aquatic animal and plant life, Wooded areas are primarily oak and hickory.

Contact: Division of Wildlife District 5 Office Rt. 3, Xenia, Ohio 45385 Phone: (513) 372-7668

ROCKY FORK STATE PARK

Location: On U.S. Rt, 50 and SR 124 East of Hillsboro. 3,474 acres

Rocky Fork of Paint Creek was impounded to form a large lake and park in the rolling hills of this county. The gentle topography of the land surrounding the upper part of the lake is due to the covering of Illinoian glacial drift which filled the early stream valley many thousands of years ago. This is in contrast to the more rugged aspect of the lower valley near the present dam which exposes the resistant dolomite rocks through which Rocky Fork cuts its way. Crowded by the early glacier the stream was forced to erode a new valley near its junction with Paint Creek. Human ecology is told in the several mills at waterfalls along the way.

The park area is extensive, partially forested with oakhickory woodlands on the slopes, beech-maple association on the uplands. Good marsh habitats are available. Waterfowl and shorebirds may be seen during migrations.

The services of an interpretive naturalist may be obtained during the summer months.

Contact: Park Manager, Rocky Fork State Park Rt. 4, Box 363, Hillsboro, Ohio 45133 Phone: (513) 393-4284

SEVEN CAVES

Location: On U.S. Rt. 50, 5 miles West of Bainbridge. 100 acres

A more picturesque and exciting hiking area would be hard to find. The Seven Caves are situated at the junction of Paint Creek and its tributary Rocky Fork close to the Wisconsin glacial boundary. Both streams were affected by glaciation: Rocky Fork was crowded by the glacier and cut the deep gorge as the melt water accumulation gave it power to erode through the resistant dolomite formations of Silurian age. The thickness of the Peebles dolomite alone is 90 feet along Rocky Fork in this area, Three trails have been developed to give the hiker access to the caves, the deep rugged gorges, winding streams with waterfalls and the lush vegetation growing on the rocks and in the valleys. The caves are solutional openings along the joints and bedding planes of the rock formations. They are not only interesting geologically but are rich in Shawnee Indian lore and pioneer history. Bear Cave is thought to be the hibernating retreat of bears many years ago. A Cliff House for refreshment is poised on the top of the gorge.

Though a fee is required for entrance, the possibility of exploring this unusual area should be examined. The desirable months for visitation are from March 15 to November

Contact: Manager, Seven Caves, Bainbridge, Ohio 45612 Phone: (513) 365-1283

THE BUCKEYE TRAIL

Location: The Trail proceeds from the SW, corner of the county near Ash Cave, North through Cedar Falls and Old Man's Cave, continues through the northern part of the Hocking State Forest to Lake Logan, past the town of Enterprise and Camp Echo Hills to Murray City.

85 miles

The Hocking County segment of a trail system which extends from Cincinnati to Lake Erie is probably its most scenic section. Winding under and up over the largest Black Hand sandstone overhang of 90 feet high and 700 feet wide, at Ash Cave, on through the glacial relic forest found in the cool ravines, up past Old Man's Cave and its towering hemlocks, through more forest of mixed hardwoods and conifers to Lake Logan, the trail affords an opportunity to see many types of habitat and association. It crosses over and travels along the Hocking River by roadway and path. past imposing sandstone outcrops of Mississippian age into strata of a later period, the Pennsylvanian. Here the bedrock is thin bedded sandstones, shales and coal beds dissected to form rocky hills and valleys. Public parks and private landowners provide stopping places. Well marked with blue blazes, the Buckeye Trail through this county is a challenge physically and intellectually. No registration is necessary but for further information and maps contact:

> Buckeye Trail Association 913 Ohio Depts. Bldg. Columbus, Ohio 43215 Phone: (614) 469-3983

> Buckeye Trail Supervisor 643 Walhonding Ave. Logan, Ohio 43138 Phone: (614) 385-4892

CAMP AKITA

Located 6 miles East of Sugar Grove on Co. Rd. 2. 970 acres

A large acreage in the Hocking hills gives Camp Akita a wide and picturesque base of operation. Much of the area is wooded with mixed hardwoods and conifers. The latter include the hemlock, yew and wildflowers more commonly found in the north. The forest provides good cover for a wide variety of wildlife at the same time making it difficult to see it. A canyon cuts through the Black Hand sandstone and makes the study of rocks, stream erosion and deposition, vegetation, and Indian history feasible and fascinating.

Akita has been used for school outdoor education workshops and lends itself well to this purpose. It has a large rustic lodge, cabins, dining facilities, outpost and shelters. Fees depend on size of group and facilities required.

Contact: Director, Camp Akita Rt. 2 Logan, Ohio 43138

CAMP BECKONING TRAILS

Location: East of SR 93, 3 miles South of Logan. 100 acres

A panoramic view of the countryside which includes the Hocking River valley is one of the many joys in visiting this site. In the maturely dissected Allegheny Plateau, the sand-



HOCKING

stone topped hills have thin residual soils of the acid type. The beckoning trails are truly that, They lead through the forest of oak-hickory association, the edge-of-forest and old fields in natural succession. A self-guiding nature trail though unusually rich flora is an excellent experience. An attractive lodge, winterized, has cooking facilities and sleeping space for 36 persons.

Contact: Camp Registrar Seal of Ohio Girl Scout Council 170 N. High St. Columbus, Ohio 43215 Phone: (614) 221-3291

CAMP ECHO HILLS

Location: In Marion Twp. on road following the Hocking River North of Enterprise. 500 acres

For a study in natural relationship including human beings, few sites in the state surpass this one. Outcrops and overhangs of the Black Hand sandstone (see Hocking State Park) somewhat less magnificent but equally significant, are exposed along the stream. Lichen, mosses and liverwort in damp places on the rocks show the beginning of rock weathering by means of plants. There are areas where the loosely cemented sandstone is breaking down in place to reveal the process of rock making soil. Potholes in the stream and other erosional features, flood plain deposits and rock terrace levels contribute to the geologic story. Some of the hillsides above the Black Hand formation are fields returning to woodland. Many dogwood, tupelo, sourwood, sassafras, hawthorn, sumac and Virginia pine are accomplishing this feat. The heavily forested woodland is of mixed hardwoods with a pleasing abundance of young tulip trees and maple. The understory of plants include beds of trailing arbutus, pipssissewa, partridgeberry, laurel and rattlesnake plantain. These are remnants of an early glacial climate. Hemlock, too, is found in the cool ravines, Birds and evidence of other animals are abundant in the many varied habitats. The Buckeye Trail proceeds through the property and some little developed trails lead into the fascinating woodland. The site is rich in history; a log cabin, farmhouse, bridge and mill site are witness to man's impact many years ago. A small lodge, the farm house and tent units constitute the facilities.

> Contact: Camp Registrar Seal of Ohio Girl Scout Council 170 N. High Street, Columbus, Ohio 43215 Phone: (614) 221-3291

CAMP GREENHILLS

Located on U.S. 33, SE. of Logan. 1,200 acres

This Boy Stout reservation is used primarily for primitive camping. Located in the sandstones, shales and coal formations of the Pennsylvanian period of geologic time, the topography is less rugged than the Hocking hills in the western part of the county. There are many acres of woodland of mixed hardwood trees including oaks, hickory, maple, cherry, dogwood, sourwood, shadbush, and other plants typical of residual sandy soils. Rocky streams and hillsides provide habitat for many forms of animal life including birds. Two

training lodges with dining facilities each limited to space for 30 people, a health lodge and two director's cottages constitute the housing facilities.

> Contact: Céntral Ohio Council. Boy Scouts of America 1428 E. Broad Street Columbus, Ohio 43205 Phone: (614) 235-5513

CAMP KLAGES

Location: 3 miles South of Old Man's Cave on SR 664. 16 acres

This property is adjacent to the Hocking State Park between Old Man's Cave and South Bloomingville. The immediate surroundings of the spacious rustic cabin are old fields now returning by natural succession to woodland. Adjoining acres of forest contain mixed hardwood trees, wildflowers, birds and other small animals. The proximity to a state property with extensive woodland trails makes it an advantageous site. The property was acquired recently by the Boy Scouts of America primarily for use by Explorers.

Contact: Central Ohio Council, Boy Scouts of America 1428 East Broad Street Columbus, Ohio 43205 Phone: (614) 253-5513

CAMP OTTERBEIN

Located on SR 328 South of Logan, 383 acres

Approximately 100 acres of forest with some virgin timber highlight this area situated among the rolling Hocking Hills. Since 1949, 43,000 pines have been planted on formerly cultivated land creating an environment for growth and production of wildflowers and small wild animals. The underlying rock strata are the coal, sandstone and shale beds of Pennsylvanian age, much less prominent in exposures than the resistance Black Hand sandstone beds just a little north and west, yet the geologic story is well disclosed. There is evidence of iron ore mining which was a part of the history of the area during Civil War days. An old stage coach road passes through the farm.

A lodge-dining hall, sleeping cabins, covered wagons and outpost camp are available for school or group use during fall and spring months. No charge for field trips.

Contact: Manager, Camp Otterbein Rt. 3 Logan, Ohio 43138 Phone: (614) 385-5712

CAMP OTY'OKWA

Located 2 miles NW. of Old Man's Cave on SR 374. 526 acres

A broad upland field provides a level area for facilities and fun at Camp Oty'Okwa. Most of the acres are in forest, however, with rocky ravines cut into the Black Hand sandstone making scenic and challenging study areas. Mixed hardwood trees and conifers create a natural environment for the relic plants typical of the acid soils of this area. An extensive



trail system has been developed to remote and little disturbed spots. Here birds and other small animals are abundant.

A roomy winterized lodge contains a food preparation and serving center, Sleeping cabins, health center, museum and shower houses complete the necessary arrangements. The camp is being used presently by schools for outdoor education workshops and field trips.

Contact: Manager, Big Brother Association of Columbus and Franklin County 2104 Fuller Street Columbus, Ohio 43201

CAMP WYANDOT

Located in Clear Creek Gorge 3 miles West of SR 33, South of Lancaster. 450 acres

Camp Wyandot is situated in the scenic Hocking hills. Clear Creek flows on the northern border and several tributary streams drain into it. Most of the area is wooded with oak-hickory and conifer forest including the hemlock and yew left as glacial plant relics. Rhododendron, laurel, partridge berry, trailing arbutus, and many ferns are found on the hillsides. Outcrops of the Black Hand sandstone create a rugged and picturesque topography. A small stream was dammed to create a lake. These many different types of habitat provide an excellent basis for ecologic studies. A large dining lodge, sleeping cabins, health center, shower houses and unit kitchens are available.

Contact: Manager, Columbus Area Council
Camp Fire Girls, Inc.
718 South High Street
Columbus, Ohio 43215
Phone: (614) 443-9713

HOCKING HILL FARM

Located 1/2 mile North of Union Furnace on SR 328. 265 acres

Hiking trails through forest and pine plantation, studies in pond life, geology and conservation practices make this farm a field trip possibility. Several varieties of oak, maple, hickory and tulip furnish a habitat for many birds, deer, raccoon, and other small animals.

Contact: Camp Coordinator, Hocking Hill Farm Box 457 McArthur, Ohio 45651 Phone: (614) 596-4353

HOCKING HILLS STATE PARK AND FOREST

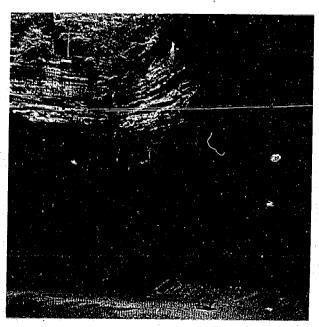
Located SE. of SR 33, along SR 374 and 664 to SR 56 which serves as a southern boundary of the area. 10.000 acres

An extensive acreage, unequalled in Ohio for scenic beauty, has been secured for preservation and recreation purposes. The rugged topography is largely due to the geologic story which is related in the deep gorges terminating headward in large coves, in the beautiful waterfalls cascading over vertical cliffs, and in the large overhangs carved by erosion

and weathering from an extensive sandstone stratum. This is known as the Black Hand sandstone and conglomerate of late Mississippian age, a sedimentary formation originating along shifting shores of an ancient sea, the loose sand and gravel cemented together in varying degrees of compaction. Purchase of the "Hocking Caves" began in 1924 after the area had experienced a lively Indian and pioneer history. Mixed hardwoods and conifers were and are the typical vegetation. Cultivated hilltops were covered with plantations of scotch, red and white pine. Glacial relic vegetation of hemlock and yew with many ferns and small health plants are found in the cool, moist canyons and ravines. Once a hunter's paradise, the forests and ledges still provide food and shelter for deer, fox, and other small animals. Birds are abundant for early morning hikes,

Six sites in the Hocking Forest have been developed as state parks. All are similar in their history, vegetation and geologic background. But each had some distinguishing characteristics which make it oustanding in its own right.

> Contact: Manager, Hocking Hills State Park Rt. 2, Logan, Ohio 43138 Phone: (614) 385-5049



Ash Cave

Located on SR 56 in southern part of county.
Approx. 80 acres

This park is usually regarded as the most spectacular because of the magnitude of the sandstone overhang. The projecting rock, shaped like a giant horseshoe, is 700 feet around the bend from one end to the other, 100 feet from the front edge to the back wall of the cavity, and over 90 feet high. A stream plunges over the cliff into a small pool at the front of the cliff. The tremendous overhang has been used extensively for camp meetings, has a natural "pulpit rock", shelter for a large audience, and remarkable acoustics. The horseshoe cavity received its name from the huge pile of ashes found there when white men first discovered it. These ashes are thought to be the residue of countless Indian campfires.



HOCKING

Cantwell Cliffs

On SR 374, farthest North park. Approx. 60 acres

The gigantic precipice, 150 feet high and shaped like a horseshoe, was caused by the headward erosion of Buck Run. As the valley was eroded, the Black Hand sandstone formed one steep escarpment after another, each having resulted from the undermining of the resistant upper zone of the formation through weathering and erosion of the weak middle zone. The lower trail winds its way through large slump blocks which have fallen from the cliff. These are due to weathering along vertical joints in the rock and the force of gravity. Masses of concentrated iron oxide are evident in many places forming long elliptical, reddish-brown concretions. On top, additional trails proceed along the rim of the precipice. Near the end of the East Rim Trail is Lookout Point from which the picturesque rock recess and the wooded valley may be viewed.

Cedar Falls

On SR 374, halfway between Ash Cave and Old Man's Cave. Approx. 40 acres

Of all the park areas, Cedar Falls has retained more of its natural, unspoiled beauty than any of the others. This is due in part to its remoteness and in part to the limited accommodations for visitors. The face of Cedar Falls is crossed by two deep groooves through which the water flows. These grooves were formed by the abrasive action of small sand particles as they were carried swiftly by the stream. Evident also is an erosional "pot hole" formed when the stream was caught in an eddy in times of heavy flow. A deeply wooded gorge at the base of the cliff contains many hemlock; one, a towering giant of 149 feet, is thought to be the largest in Ohio.

Conkle's Hollow

A short distance from SR 374 between Old Man's Cave and the Rock House.

Towering walls of Black Hand sandstone nearly 250 feet high, a deep rocky gorge so narrow that in places the distance at the top from cliff to cliff is less than 300 feet, the tall trees and profusion of other vegetation on the valley floor, the series of waterfalls cascading over moss covered rocks from small side valleys all contribute to creating a feeling of mysticism and grandeur. The natural causes were the same: rock weathering, stream erosion, lush vegetation from ample moisture and protection. Carpets of partridgeherry, beds of orchids and other wildflowers, many varieties of migrating and nesting birds, add even more to the eye of the beholder. Facilities are limited; the trail leading to the gorge is a mile long; both facts helping to protect the area from unappreciative hikers.



Old Man's Cave

On SR 374 and 664, West of Logan. Approx. 150 acres

The most popular of all the Hocking areas, this gorge is both outstandingly beautiful and geologically significant. In addition, it has many surprising tunnels, stairways, and panoramic views. The best way to get the geologic story as well as to see the three miles of varied woodland, is to travel downstream beginning at the head of the gorge. Old Man's Creek tumbles over a series of ledges formed by the resistant upper layers of the Black Hand, and falls forty feet to a plunge basin. Below this, undercut ledges and numerous potholes. including a large one called "The Devil's Bathtub", indicate intermittent strong erosional stream flow. The potholes were the result of grains of sand and gravel being caught in eddies and carving progressively bigger identations in the less resistant middle zone of sandstone. In the north wall, near the lower end of the upper gorge, is the main overhang known as Old Man's Cave. Here a fugitive hermit is reported to have spent the last years of his life. This cliff, 75 feet above the stream and 300 feet long, extends over a cavity cut into the same weak middle zone of the Black Hand. Beyond this overhang is a huge block of the formation which has separated from the wall by weathering in a vertical joint. Another large overhang occurs downstream. A resistant lower layer of the Black Hand holds up the lower falls while the recess cavity has been cut back into the soft Cuyahoga shale. The contact of the two formations is a striking geological phenomenon. On the face of the Lower Falls is the profile of an old man, an erosional feature in the rock. A towering precipitous cliff beside the waterfall exposes the entire section of the Black Hand.

Rock House

On SR 374, one mile South of SR 180. Approx. 160 acres

Although Rock House is formed in the same Black Hand sandstone as the other park areas, its features are quite different. The resistant upper part of the formation makes



a roof over a mass of rock weathered into sets of vertical joints and horizontal bedding planes. The result is a large corridor with "windows" looking out on the valley. By freezing and thawing and seepage of water through the weaker middle section of the formation, the crevices have become enlarged, but instead of falling away in large slump blocks. as in the other areas, the major portions remain attached. The high cliff of 100 feet which is a continuation of the inner wall of the Rock House was formed by headward erosion and has a waterfall trickling over it even in dry seasons. The park has well developed trails which afford access to the Rock House and give an opportunity to observe liverwort. lichen, and moss coatings on the rock, a wide variety of hardwood trees, ferns, and the persisting glacial relic vegetation. This includes huge hemlocks, yew, and various members of the heath family.

One trail leads to a fire tower which gives a good view of the Hocking Park region, as well as the tree tops in the immediate area. A fire warden will demonstrate triangulation for fire location and fire fighting methods if requests are made well in advance.

HOLIDAY HAVEN

Located at Buena Vista on Co. Rd. 24, 8 miles NE. of Laurelville, 480 acres

Holiday Haven is a family owned recreation area. Two small lakes have been made for this purpose but provide many sites for water related plant and animal studies. Most of the area is roughly rolling and wooded. One ravine is especially rugged, with cliffs and over hangs of Black Hand sandstone. There are numerous hemlocks, laurel, sour gum and tulip trees in the mixed forest association. Hiking trails provide an access to seeing and enjoying the wildflowers and small animals typical of the area.

Contact: Manager, Holiday Haven Rt. 2, Ashville, Ohio 43103 Phone: Amanda 969-2011

LAKE LOUN STATE PARK

Located just off U.S. 33 on SR 664 North of Logan. 715 acres

Logan Lake covering approximately 400 acres of rolling Hocking county farmland was impounded primarily for recreation purposes. The 300 acres surrounding the lake contain natural succession vegetation for the most part but a small oak-hickory woodland on the west side remains unspoiled. The water, woodland and fields provide a variety of habitats worthy of observing.

Contact: Manager, Lake Logan State Park Rt. 2, Logan, Ohio 43138 Phone: (614) 385-3444

ROCK BRIDGE

Location: North off U.S. 33 at Fairview Cemetery near Rockbridge.
40 acres

This unusual and picturesque geologic feature is found at the head of a ravine not fur from the Hocking River. Caused by headward erosion, the resistant part of the Black Hand sandstone formation remains as abridge 50 feet across, six to ten feet wide with an arch 40 feet above the stream which has contributed its erosive force. A wall of the sandstone and an opening between the shelf of rock and the bridge together with the small waterfall, make a delightful setting for the rich flora of the area. Woodland surrounds the structure, trees of the mixed oak forest type. Wildflowers, ferns, deer, fox and other wildlife are reported to be abundant. The bridge is dangerous to cross and the owner grants permission to visit on a no risk basis.

Contact: Mr. Zora Crawford Rt. 1, Rockbridge, Ohio 43149 Phone: (614) 385-3974

HOLMES COUNTY

CHERRY RIDGE FARM

Location: 2 miles west of Sugarcreek on Cherry Ridge Road off SR 39. 135 acres

This farm consists of rolling, fertile land. It is noted throughout the area for its early contribution to the conservation movement. The owner and his father were instrumental in establishing the Holmes County Soil and Water Conservation District in 1947. Contour strip farming, improved pasture, woodland of mixed hardwoods with abundant wildlife and a livestock program are items of interest. The property is a part of an area called "Little Switzerland" typified by the high hills of 1,280 feet above sea level, and low elevations at 900 feet. Though a Swiss himself the owner claims kinship with the large Amish population of the area. Two added highlights are the Swiss bells worn by the cows and a house full of intriguing antiques. Groups are invited to visit in the spring, summer, and early fall months.

Contact: Frank Shutt Box 319, Rt. 1 Sugarcreek, Ohio 44681 Phone: (216) 852-2142

SPRING WALK FARM

Located 1-1/2 miles NE. of Nashville, right off SR 514 on Twp. Rd. 362. 283 acres

Recognized as a good dairy farm, Spring Walk may be observed also for the use of conservation practices. The farm, located on the hilly end moraine of the Wisconsin glacier, is laid out in strips for contour farming. A farm pond provides water habitat with a vegetation border and wild-life plantings. A large woodland of mixed hardwoods and some pine plantations have typical wildflowers and small animal life. Owner welcomes field trips anytime but August.

Contact: Spring Walk Farm Big Prairie, Ohio 44611 Phone: (216) 378-2320

TROYER'S HOLLOW

Located on Twp. Rd. 92, off SR 556, South of SR 39, East of Millersburg.
60 acres

A special treat is in store for classes who find this isolated scenic valley. Situated in the heart of the county's "Little Switzerland" area, the Hollow makes an intriguing geologic study. Doughty Creek, because of a stream reversal following the blocking of the valley by a glacial end moraine, has cut a deep gorge through the Pennsylvanian age rock strata



HOLMES-HURON

for a distance of about two miles. The campgrounds were formerly the site of Troyer's Mill and other pioneer activities. The bridge across the creek was washed out in the 1935 flood eliminating the township road and thus giving a feeling of remoteness from a busy world. The property is all woodland except the flood plain along the creek, the trees in the cool, lower level primarily hemlock. A small spring-fed pond bordered partially by the wispy hemlocks, the streams, the rock layers, some of which form overhangs, the singing birds, and the seclusion all contribute to making this a delightful study area.

This is an excellent site for a field trip or an overnight camping study program.

Contact: Orie Oswald Charm, Ohio 44717 Phone: (216) 893-4172

WHISPERING HILLS

Located 3 miles South of Shreve on SR 514. 250 acres

Winds moving through the trees at Hemlock Gorge and other scenic parts of this extensive recreation area make its name quite appropriate. Cool, deep ravines cut through upper Mississippian age sandstones and shales are heavily wooded with hemlock and some hardwoods. The hemlocks are known as glacial relic vegetation, meaning that they were northern trees seeded ahead of the glacier as it advanced south. These trees as well as Canadian yew, wintergreen, trailing arbutus and partridgeberry have persisted in these valleys because the microclimate is similar to their original habitat many miles northward. The steep walled gorge is the result of stream reversal as the glacier blocked the normal stream flow forcing the impounded waters to cascade over the lowest point and, with its great volume of released water, cut through the rock strata to form the narrow ravine. Hiking trails and campsites, a large lake and a frog pond provide facilities and many habitats for study. Sincere efforts are being made to maintain the area in its state of natural beauty.

> Contact: Whispering Hills Recreation, Inc. P.O. Box 607 Shreve, Ohio 44676

HURON COUNTY

BELLEVUE RESERVOIR #4

Location: On Monroe St. Bellevue. 8 acres

A small park has been developed at this reservoir, one of 5 supplying the city water. A project of the Junior Chamber of Commerce, the area has new facilities for picnicking. The city lies on the glaciated, rather smooth Lake Plain, on the broken beach ridges of old Lake Maumee. It has a thin coating of glacial drift above the Columbus limestone of Devonian age. The area is famous for the great number of sinkholes in which the surface water drains to underground channels which emerge at lower levels, probably in the Blue Hole and other springs of the Castalia prairie. The plot contains mixed hardwood trees and some typical of wetlands. Birds, wildflowers and small mammals may be seen.

Contact: Manager, Bellevue Reservoir #4 City Bldg., Bellevue, Ohio 44811 Phone: (419) 483-4403

CAMP CONGER

Location: On Walnut Rd., 2-1/2 miles SW. of North Fairfield. 30 acres

Situated on the flood plain and banks of the East Branch of the Huron River this camp was one of the earliest in the state. The main entrance is at the Lewis Conger residence, the camp a part of the farm property. The area lies near the edge of the Defiance moraine on sandstones and shales of Mississippian age. About a third of the campsite is wooded with a wide variety of species, some of them labelled. A 2-1/4 acre lake was constructed in a ravine above the camp but the river itself is a better resource for studying aquatic animals and plants. A bank on the west side of the river is a cut bank showing the glacial drift deposits. Bedrock exposures are evident in the river farther north.

A dining hall with fireplace, and cabins constitute the living arrangements. The hiking trails and facilities of this camp might well be combined with Camp Singing River which is just north of the site.

Contact: County Extension Agent 4-H Court House, Norwalk, Ohio 44857 Phone: (419) 662-5251

CAMP SINGING RIVER

Location: On Walnut Rd., North Fairfield 93 acres

Many wildflowers including some of the prairie species such as bottle or closed gentian may be found here. The habitats include grassland, creek and river bank, fence rows and woodland. A great variety of trees such as willows, sycamore, ash, walnut, beech, maple, oaks, tulip, sassafras, dogwood and papaw reflect the diversity of environment. Several stalwart oaks boast longevity. The camp lies near the crest of the Defiance moraine and only a short distance from the Norwalk esker ridge. Sandstone and shale of Mississippian age are exposed in the river bed. The glacial deposits include large erratics and numerous small igneous granites brought from the Canadian Shield by the glacier. Birds of edge-of-forest and field are seen, including the prized bluebird.

A large lodge partially winterized and tent units constitute the living facilities. Hiking trails extend to Camp Conger just south of the property.

Contact: Camp Registrar
Erie Shores Girl Scout Council
42639 North Ridge Road
Lorain, Ohio 44055
Phone: (216) 324-6104—Elyria Office
233-6112—Lorain Office

CAMP TODIMECA

Location: On Peru Center Rd. 8 miles South of Monroeville. 297 acres

In a day when camps tend to develop more and more comfort and conveniences, this camp maintains a sense of retreat and oneness with nature environment. In living and cooking out-of-doors, sleeping in covered wagons and tepees with no electricity simplicity is achieved. The environment is rich in natural features. The West Branch of the Huron River,



shallow above the dam at Monroeville, wanders through the property. A two acre pond provides additional habitat for the study of aquatic plants and animals. Much of the site is wooded with flood plain vegetation as well as uplands of maple, beech and oak. A heronry in the beech trees has existed for many years although the population has diminished considerably. No permanent marsh is available; the herons feed at Lake Erie. An old orchard is another interesting habitat. A very old farmhouse built of bricks and wood from the area by a West Virginian who walked to the site of his new home may be viewed. A food service center, shower house and barn for storage are the extent of "conveniences" maintained. Hiking trails and canoes give access to all wooded parts of the property.

> Contact: Rev. Harold Black 7127 Kipling Drive, Holland, Ohio 43528 Phone: (419) 365-4040

> > 865-3943

FRENCH PROPERTY

Location: On SR 303, 2-1/2 miles East of SR 60. 230 acres

A real effort has been made by the owners of this farm to preserve some woodland, "green islands" among the cultivated fields of the area. Five woodlots varying in size from 3 to 8 acres have not been pastured for 40 years permitting new growth and an understory to develop. The predominant trees are sugar maples with typical trees and shrubs in association. Natural forest succession is demonstrated by volunteer maples invading a small planting of pines. A small tributary of the Vermilion River runs through the property. The stream-dissected glacial plain is somewhat scenic for this part of Ohio.

The farm is a seed farm visited by vocational agriculture classes from time to time. Field trips to observe the farm or the wooded areas may be arranged by responsible persons.

> Contact: Winthrop and Robert French Rt. 3, Wakeman, Ohio 44889 Phone: (216) 839-5654

VALLEY BEACH PARK

Location: On SR 61, 1 mile South of Norwalk. 30 acres

This is a recreation enterprise with campsites and picnic facilities. However it is situated along the East Branch of the Huron River which provides studies in stream erosion and deposition, flood plain vegetation and animal life. This includes a number of tree species on a variety of soil types. Of interest also may be the broken beach ridges of old Lake Maumee and slightly north, the beach ridge of old Lake Whittlesey. A third glacial lake level, old Lake Warren, may be observed a short distance north of the city of Norwalk,

> Contact: Donald J. Bauer Rt. 3, Norwalk, Ohio 44857 Phone: (419) 668-8365

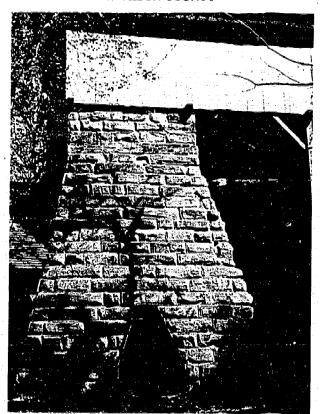
WILLARD MARSH WILDLIFE AREA

Location: Off SR 103 at Celeryville. 2,676 acres

This property lies in an old glacial lake bed, the waters impounded by the Defiance moraine on the north and the Wabash on the south. It is a portion of one of the most extensive peat bogs in the state. Peat depth ranges to 20 feet. Several unique plant species typical of northern bogs may be observed as well as deer, fox, squirrel, muskrat, mink, and rabbit. Most of the property has been burned over and aspen has come in following the bog fires.

> Contact: Division of Wildlife District 2 Office 952 Lima Avenue. Findlay, Ohio 45840 Phone: (419) 422-6757

JACKSON COUNTY



BUCKEYE FURNACE

Location: Off SR 124, 10 miles East of Jackson. 270 acres

One of several sites known to have furnaces for smelting ore in the early days of Ohio history this one is being reconstructed by the Ohio Historical Society. The source of iron was a narrow formation lying on top of the Vanport limestone of Pennsylvanian age. The site contains rock exposures and many species of trees all about the same age due to the program of cutting to make charcoal for smelting the iron. Several species of oak, hickory, walnut, ash, maple and tulip. predominate.

The area is being developed but not open to the public at the present time. For further information contact:

> The Ohio Historical Society Columbus, Ohio 43211



JACKSON-JEFFERSON

CAMP CANTER'S CAVE

Location: On U.S. 35, 7 miles NW, of Jackson. 59 acres

This camp is situated in one of Ohio's botanically rich areas and one of the state's most scenic and interesting geologic sites. The region is in the highly dissected Allegheny Plateau where the basal formation of Pennsylvanian age known as the Sharon conglomerate is exposed by erosional forces. The "cave" is actually an overhang where a portion of this formation, being more resistant at the top and less so below, has weathered and been eroded to form the scenic features. Three coves are on the property, each picturesque with its towering rock cliffs, abundant ferns, yellow birch, hemlock, and other glacial relic vegetation which has persisted in the cool moist ravines. On the drier hillsides are the magnolias, migrants from the south, One, commonly called bigleaf, is found only in Jackson county in Ohio. Large tulip trees, bigleaf, oaks, maples, walnut, and hickory are in the woodland association.

The camp has a partially winterized lodge and cabins. Field trips and/or school camping may be negotiated.

Contact: Manager, Camp Canter's Cave Court House, Jackson, Ohio 45640

COOPER HOLLOW WILDLIFE AREA

Location: On U.S. 35, 11 miles SE. of Jackson. 4,140 acres

A widely varied ecological situation exists in this southeastern Ohio area. The site lies in the highly dissected Allegheny Plateau region underlain by Pennsylvanian age sandstones, shales, coal, and limestone. Part of the territory is in a divided watershed between Symmes Creek and Raccoon Creek with the upland covered by oak-hickory woodlands and fields in natural succession. In the bottomlands pin oak, red maple, river birch, and sycamore forest predominate. Alder and buttonbush swamps are present. "Hung" valleys with poor drainage resulting in sedge meadows provide an unusual study area, Beaver, muskrats, woodduck, woodcock, and numerous species of amphibians and reptiles are found in the water and swamp habitat; deer, squirrel, grouse, raccoon, opossum, skunk, woodchuck, bobwhites, and rabbits are all common in the uplands. Songbirds and wildflowers occur in abundance and diversity in abandoned orchards, fields, and woodland. Conservation practices pertaining to soil, water, and wildlife may be observed.

> Contact: Manager, Cooper Hollow Wildlife Area Route 1, Oak Hill, Ohio 45656 Phone: (614) 682-4383

LEO PETROGLYPH STATE MEMORIAL

Location: Off U.S. 35 NW. of Jackson.

A large Sharon conglomerate outcrop provided the surface for a collection of prehistoric carvings near the little village of Leo. It is believed that these were made by late Fort Ancient Indians. They are similar in some ways to the pictographs on Inscription Rock at Kelleys Island in Lake Erie which are thought to have been made by the prehistoric Erie Indians. Crude pictures and symbols carved in stone was one means by which Indians left their mark. Many of the objects are recognizable—birds, fish, a mammal which is probably a bear, human feet and animal tracks. Messages on the rock have so far escaped translation.

The pictographs are situated in a rich ecologic environment; large mixed oaks and associated species, ferns, mosses and other plants which persist in a cool, moist environment. Beyond the overhang and inscription rocks, trails lead to this natural area.

Contact: The Ohio Historical Society 17th & 171 Columbus, Ohio 43211

LIBERTY WILDLIFE AREA

Location: Off U.S. 35, NW. of Jackson near County line. 145 acres

This area is situated in one of the most noteworthy geologically and botanically rich townships in the state. It lies in the highly dissected Allegheny Plateau underlain by shale and the resistant Sharon formation, a conglomerate which marks the beginning of the Pennsylvanian age of bedrock. The area supports a rich, diffuse bottomland flora where wild sunflowers are common. Liberty Township is also the northern limit of bigleaf and umbrella magnolia found on the hillsides. Deer, grouse, squirrel and woodcock are the principal animal species.

Contact: Division of Wildlife District 4 Office 360 E. State St., Athens, Ohio 45701 Phone: (614) 593-6933

RICHLAND FURNACE FOREST

Location: On SR 327, 4 miles West of Wellston. 2.343 acres

This forest was established in 1948 primarily for timber production and public hunting for rabbits, squirrel, grouse and deer. It lies below the glacial boundary in the Pigeon Creek Watershed affected indirectly by glaciation. The streams have cut through the resistant Sharon conglomerate, the basal stratum in the Pennsylvanian age rocks making steep ravines and hilly terrain. The forest type is oak-hickory containing tulip, basswood and beech as well. The property is undeveloped but hiking in spring, summer and fall is worthwhile and feasible.

Contact: Division of Forestry and Reclamation 345 Allen Ave., Chillicothe, Ohio 45602 Phone: (614) 774-1596

JEFFERSON COUNTY

AUSTIN LAKE

Location: On SR 152, 5 miles North of Richmond, 1,700 acres

Opened in 1945 this privately owned park lies in a beautiful, unspoiled valley. The site is reported to be mostly wood and with some virgin timber, a mixed oak forest with many species in the association. Wildflowers are abundant and many beaver dams, huts and bank dens may be observed on the streams and ponds. A 130 acre lake, spring and stream fed, is used for recreation. Great pride is taken in the preservation of the natural beauty and wildlife.

Contact: Glenn C. Cable Rt. 1, Toronto, Ohio 43964 Phone: (614) 544-5260



BRUSH CREEK WILDLIFE AREA

Location: Off SR 164 and Co. Rd. 55. East of Monroeville. 2.550 acres

The topography of this area is typical of the deeply dissected Allegheny Plateau with steep slopes and long narrow ridge tops. The region is unglaciated and the underlying rocks are sandstones, shales, coal and limestone of Pennsylvanian age. Soils are acid but well-drained. Oak-hickory forest types dominate the ridge tops and drier slopes. Elmash-cottonwood and beech-maple forest types are prevalent on the lower slopes and along the streams. Spring wild-flowers are abundant and animal populations include deer. Quail and grouse are common; woodcock are known to nest in the area and small numbers of waterfowl use it during migration. Beaver activity may be observed. The results of strip mining are evident. Wildlife, soil and water management practices may be seen. Some facilities are present.

Contact: Manager, Brush Creek Wildlife Area Rt. 1, Hammondsville, Ohio 43930

Phone: (216) 523-1708

FRIENDSHIP PARK

Location: Off SR 151 North of Smithfield. 1,150 acres

This large acreage, presently under development as a multipurpose recreation park, is primarily denuded strip mine land. It was a gift to the Jefferson County Commissioners by Consol's Hanna Division. Potentially, recreation is a wise use of reclaimed land.

The area lies beyond the boundary of glaciation in the upper Pennsylvanian Series along McIntyre Creek. Three coal layers, the Waynesburg at the top, the Pittsburgh 200 feet below and the Uniontown which lies between were reason enough for the extensive stripping operation. McIntyre Creek is now dammed to form a 90 acre lake. Campsites and picnic areas are being developed. Reforestation, crown vetch and grass plantings are curbing erosion and providing habitat for wildlife. Experiments in agriculture and gardening will be additional projects to observe as the land reaches its potential use.

Contact: Jefferson County Commissioners County Court House, Steubenville, Ohio 43952

G.K.L. WILDLIFE AREA

Location: In Cross Creek Twp. 500 acres

One hundred acres of this property has been stripped for the removal of coal. This process has made the Pennsylvanian age rock formations accessible for study. The remaining land contains open fields and forests with trees and flowers native to eastern Ohio. These are in the mixed oak forest type with a predominance of hickory and walnut. Animals are abundant and there is evidence of deer. Beaver have moved into the area in the last two years and although they are few in number, the signs of habitation are not hard to find. There are lakes which were created by the stripping process and by spoil slides which dammed the natural creek.

Permission for use will not be granted during hunting season or on days when the rifle or trap range are being used.

Contact: Andrew Hammack, Secretary G.K.L. Wildlife Association 136 Sycamore Street, Mingo Junction, Ohio 43938 Phone: (614) 282-9978

JEFFERSON LAKE STATE PARK

Location: On SR 43 West of Richmond. 933 acres

High hills with deep ravines and woodland surrounding a small lake makes this park seem remote from civilization. The near-virgin oak-hickory forest and abundance of wildflowers and small mammals provide an excellent site for nature study. The lake is of special interest for its many unusual plants; marshes have rich flora and the rare fourtoed salamander has been found there.

> Contact: Manager, Jefferson Lake State Park Rt. 1, Richmond, Ohio 43944 Phone: (614) 765-4459

KNOX COUNTY

BRINKHAVEN ACCESS

Location: On SR 62 at Brinkhaven. 36 acres

Boat launching access to the Mohican River is available at the old mill dam. Brinkhaven lies just east of the Illinoian glacial boundary in the flood plain of a river too big for its present valley. Flowing south the Mohican is a typical glacial meltwater river which carried a great volume of water as the Wisconsin glacier wasted back to the north. Rock outcrops in the banks are the sandstones and shales of late Mississippian age. Flood plain vegetation may be observed.

Contact: Division of Wildlife District 1 Office 1500 Dublin Rd., Cols., Ohio 43212 Phone: (614) 469-3337

CAMP ANDERSON

Location: North of SR 3, 5 miles West of Mt. Vernon. 205 acres

A wide variety of habitats are found on the rolling fields and woodland of this property. Two ponds and small streams give ample study area for aquatic plants and animals. Both the Wisconsin and Illinoian glaciers passed over the property leaving varying thicknesses of glacial drift. It is underlain by fossiliferous sandstones and shales of the Mississippian period, exposures of which may be found in and near the streams. The wooded areas are rich in tree species of the beech-maple association. Hickory, walnut, poplar, locust, wild cherry, oak and dogwood also are present, Wildflowers, birds, deer, and small animals are abundant. A lodge, a barbeque pit, and hiking trails are available.

Contact: Manager, Camp Anderson First Christian Church, 110 East. Vine Mt. Vernon, Ohio 43050 Phone: (614) 392-3706

CAMP NELSON DODD

Location: Off U.S. 62 near Brinkhaven. 750 acres

This campsite is situated in a scenic area just beyond the boundary of Illinoian glaciation. Its topography is influenced by the fact that it is in the highly dissected Allegheny Plateau and by the Mohican River which borders it. The underlying



rocks are Mississippian age sandstones and shales of the Logan formation; the famous Black Hand formation belonging not far below the valley floor. The residual soils are thin and acid. Much of the site is covered with near-virgin timber of the mixed oak forest type. Wildflowers, birds and small mammals are plentiful.

The camp is being used presently for YMCA resident camping and by schools for outdoor education but further development requires year-round use. Field trips may be arranged also.

Contact: Manager, Camp Nelson Dodd YMCA, 470 West Church Street Newark, Ohio 43055 Phone: (614) 326-6811

DANVILLE CONSERVATION FARM

Location: 2-1/2 miles **E**ast of Danville. 280 acres

A five year wildlife farm management program is being conducted on this property. Of special interest is a three and one half mile trail system, known as the "Walter Lauffer Trail" which covers habitats ranging from cropland and open field to climax forest. Wildlife management and farming practices may be observed from this trail. Many song birds, ruffed grouse and white-tail deer may be seen also. The Central Ohio Anglers and Hunters Club would welcome a cooperative research program with advanced students. Field trips may be arranged by registration 30 days in advance. The months most desirable are April, May, June, September, and October. Primitive upper grade school camping arrangements can be made upon special request.

Contact: Herb Rumfield, Director 387 Westwood Drive Rt. 1 Galloway, Ohio 43119 Phone: (614) 879-8188

EDUCATIONAL PARK EXTENSION

Location: On SR 586, 2 miles SE. of Mt. Vernon. 63 acres

The Mt. Vernon City Schools have acquired this property for development as an outdoor education extension laboratory. The land lies on the dissected, glaciated Allegheny Plateau, on a hill overlooking the Kokosing River flood plain. This is a typical glacial stream valley near the edge of the Wisconsin glacial boundary, too big now for the stream within it. The glacial deposits of varying thickness are underlain by the shaly sandstones and siliceous shales of the Mississippian period. Transported glacial igneous and metamorphic rocks are easily found. The property boasts more than 30 species of trees in the mixed harwood forest type and a wide variety of birds, shrubs and ground cover.

Contact: Manager, Educational Park Extension West Chestnut Street Mt. Vernon, Ohio 43050 Phone: (614) 397-7015

KNOX LAKE WILDLIFE AREA

Location: On SR 95. 1 mile NE. of Fredericktown. 760 acres

A small dam on a branch of the Kokosing River has created a large lake. It lies in rolling country underlain with thick glacial deposits. Occasional outcrops of the Mississippian sandstones and shales are visible. The lake is well stocked with a variety of fish. The upper third of the basin contains deciduous trees to provide maximum wildlife cover. Heron nests can be observed on these trees in mid-lake. The banks around the lake are lined with trees also. A small picnic area is just below the dam.

Contact: Division of Wildlife District 1 Office 1500 Dublin Rd., Columbus, Ohio 43212 Phone: (614) 469-3337

LAKE COUNTY

THE BUCKEYE TRAIL

Location: North and West from Central Geauga County, then North to Lake Erie.

From Big Creek the trail turns toward Mentor traveling over glaciated upland until it reaches the Lake Plains region. Here it proceeds into Mentor Marsh, a unique nature preserve which is well worth seeing. (See description of Mentor Marsh) Extreme care must be followed on the trail through this area. For further information.

Contact: The Cleveland Museum of Natural History, 10600 East Blvd. Cleveland, Ohio 44106 Or: The Buckeye Trail Association 915 Ohio Departments Building Columbus, Ohio ;3215 Phone: (614) 469-3984

CAMP CEDAR HILLS

Location: At Vrooman Road and I-90. 160 acres

Extensive woodland and rugged topography characterize this desirable camp site. Two lakes provide habitat for aquatic plant and animal life. The area is near the Paine Creek valley which is deep and narrow, cutting through the Ohio shale to form the scenic terrain. The forest type is mixed hardwoods of oak, beech, tulip and sometimes hickory with hemlocks and other glacial relic plants growing on the north facing slopes. Trails have been developed which give access to the study of the understory wildflowers and animal life: A winterized lodge, with sleeping area for 39 persons and food service, and a cabin housing 6 persons provide facilities.

Contact: Rev. William S. Brown
Episcopal Diocese of Ohio
2230 Euclid Avenue
Cleveland, Ohio 44125
Phone: (216) 771-4815

CAMP LEJNAR

Location: On Kniffen Rd. in LeRoy Twp. 432 acres

Situated in a remote part of the county in the Upper Paine Creek Watershed is a Girl Scout camp. Mixed hardwood forest, streams, and meadow provide a variety of habitats



for study. Permission may be obtained for day hikes and the use of shelter. The Barn which provides sleeping quarters for 32, oil heat and cooking facilities, may be rented during the week during school months for a reasonable amount. Contact the Lake Erie Girl Scout Camp, address below.

Contact: Camp Registrar, Lake Erie Girl Scout Camp 1001 Huron Road, Cleveland, Ohio 44115 Phone: (216) 241-3180

CAMP ROOSEVELT

Location: 5 miles East of Painesville, on Lake Erie. 60 acres

Shoreline, stream, woodland, and field furnish many types of environment for studying plants and animals. Remnants of the mixed oak forest contain forty different varieties of trees. Wildflowers are abundant in woods and fields where hiking and riding trails have been developed. The camp is a riding school in the winter months, but no buildings are available for outdoor education.

Contact: Camp Roosevelt Perry, Ohio 44081 Phone: (216) 259-2901

CAMP RUTH WEIGAND

Located on Carter Rd. in LeRoy Center Twp.
295 acres

This Girl Scout property has a great variety of trees, wild-flowers, small animals, and nonpoisonous reptiles. In addition to the mixed hardwood forested area, open fields in natural succession are available for study. Paine Creek, a tributary of the Chagrin River, runs through the roperty. It has formed ravines in the Ohio shale of Devonian age making the typical rounded hills and cliffs. Trails have been developed through the area. Two cabins with limited facilities or shelters may be reserved by nature study classes during the week in fall and spring months.

Contact: Camp Registrar, Lake Erie Girl Scout Camp 1001 Huron Road, Cleveland, Ohio 44115 Phone: (216) 241-3180

HEADLANDS BEACH STATE PARK

Location: North Terminus of SR 44, 120 acres

This park is a small area adjacent to Mentor Marsh on Lake Erie and Grand River as it flows into the lake. The vegetation is primarily the trees and wildflowers associated with water or wet areas. Some swamp forest and marshlands provide rich habitat for birds and other animals as well as the emergent plants of aquatic areas.

Contact: Manager, Headlands Beach State Park 9601 Headlands Road Mentor, Ohio 44060 Phone: (216) 257-1330

THE HOLDEN ARBORETUM

Location: In Kirtland Twp. on Sperry Rd.. North of SR 6. 2.100 acres

From spring's awakening to winter's hibernation, Holden's extensive acres give unparalleled delight. Truly a tree museum, the Arboretum is a repository for 5000 different kinds of cultivated woody plants. The beech-maple climax forest predominates in the natural areas. In the autumn, the maples, oaks, sassafras, sour gum, dogwood, and beech are ablaze with the reds, yellows, and browns, of the changing season. Flowering trees and shrubs bloom in the spring, among them ornamental fruits and fragrant lilacs. Many scenic nature trails have been developed through the Arboretum particularly over, around, and along the East Branch of the Chagrin River, by 14 lakes and ponds, through innumerable ravines and to spectacular Stebbins Gulch. Here, resistant sandstone forms a precipitous cliff which overlies the easily eroded Ohio shale of Devonian age. A nature preserve protects numerous birds, nesting, and in migration deer, fox, and small mammals. School classes and youth groups may arrange for free guided tours. Special nature courses, bird walks, flower and plant identification courses, instruction on pruning, and soil improvement are offered.

> Contact: Director, The Holden Arboretum Sperry Road, Mentor, Ohio 44060 Phone: (216) 946-4400

LAKE COUNTY METROPOLITAN PARK DISTRICT

This park district was created in 1958 for the purpose of preserving the natural areas in the county. Seven parks covering 1600 acres have been developed along rivers and streams, much of the land heavily wooded, the topography rugged. For descriptions of these see listing that follows. For maps, naturalist service and reservations for any of these areas, contact in advance:

Supervisor, Lake County Metropolitan Parks 1385 Jackson Street Painesville, Ohio 44077 Phone: (216) 352-9568

Chapin Park and State Forest

Location: In Kirtland Twp. between SR 306 and Hobart Rd. 362 acres

The forest was a gift to the State made in 1949. The area includes an island of Sharon conglomerate elevated above the surrounding terrain. This is a contact sandstone conglomerate of Pennsylvanian age. The property is heavily wooded with northeastern Ohio beech forest type with mature oak, maple, tulip, and cucumber trees in association. The area is leased by the Lake County Metropolitan Park District. Hiking trails in park and forest have been developed where understory wildflowers and shrubs, as well as small wild animals, may be observed. A scenic knob to the south is Little Mountain, the highest in the region, capped by the Sharon formation. White pines up to 110 feet, mature hemlocks and other north woods species grow in the cool, moist climate.



LAKE-LAWRENCE

Helen Hazel Wyman Park

Location: On SR 86, South of Painesville.
48 acres

This plot lies mainly in the rough flood plain fork of Grand River and its tributary, Big Creek. A study of the dense flood plain forest, wildflowers and the stream pattern may be made on the developed trails.

Hell's Hollow Park

Location: LeRoy Center Rd. in LeRoy Twp. 560 acres

The largest of the Lake County parks, Hell's Hollow, is situated in the upper Paine Creek Valley. The forest is of mixed hardwoods and glacial relic vegetation on the north facing slopes of the Portage Escarpment. In the deep, narrow valley, in addition to the hemlock, Canada mayflower and yew may be found. Good hiking trails lead through the area of unspoiled beauty. Months most desirable are in spring and fall.

Hidden Valley Park

Location: On SR 528, on the Grand River. 113 acres

A recently acquired, unspoiled tract of valley and ridge has been added to the small recreational area of this park. The north facing slopes have a mixed hardwood association of maple, beech, and hemlock, the latter typical of woodlands in the north. Other plants and small animals associated with Ohio's north woods may be seen.

Hogback Ridge Park

Location: In Madison Twp. on South side of Grand River, East of SR 528, 172 acres

An excellent area for ecologic study, this park has a steep ridge called a hogback slopes and flood plain between Grand River and Mill Creek at their junction. The north facing slopes are typical of Ohio's north woods environment with hemlock, white pine, round leaf dogwood, and buffalo berry. The streams have eroded through the Chagrin shale and the glacial end moraine forming cliffs and ravines. Good hiking trails provide access to waterfalls and excellent wildflowers areas. This is the site of Fort Madison and an Erie Indian village. Spring and fall months are most suitable for field trips.

Indian Point Park

Location: Seely Rd. in LeRoy Twp. 116 acres

Indian Point is historically significant as the site of an Erie Indian village and fort. The earthworks remain in fair condition. It also affords a spectacular view of the Grand River and Paine Creek from a high flat-topped point between the two moraines deposited by the wasting glacier. The streams have cut through the Chagrin shale and the glacial deposits to form steep slopes and flood plain topography.

Essentially, virgin remnants of the Portage Escarpment mixed forest type remain on the north facing slopes. This is the red oak, beech, and hemlock association. Lowlands are frequently flooded in winter.

Riverview Park

Location: Along Grand River. 28 acres

This is a small picnic area overlooking the Grand River. Though it is limited as a wildlife study area, the stream erosional and depositional features and valley profile may be observed:

WICKLIFFE HIGH SCHOOL LAND LABORATORY

Location: At 2255 Rockefeller Rd., Wickliffe. 90 acres

Fortunate is this school which has a sizeable acreage of forest, field, and marsh in its own back yard. The pond and marsh area is rich in wetland vegetation including sedges and grasses. Muskrats, painted turtles, snapping and spotted turtles are collected, studied, and returned to their natural habitat. Deer and weasel are observed occasionally. The variety and number of birds is outstanding ranging from warblers to pileated woodpeckers, nesting waterfowl to field sparrow. Trail guides may be obtained for preview and used during a field trip. Months suggested for visits are April, May, September, and October.

Contact: Walter J. Hintz Wir...liffe High School 3255 Rockefeller Road Wickliffe, Ohio 44092 Phone: (216) 944-0800

WILLOUGHBY-EASTLAKE LAND LABORATORY

Location: South of SR 84 on Shankland Rd. 30 acres

Development on this site is a trail which leads down a hillside past a natural spring into a wooded area and along a small creek. It then circles back into the woodland giving a tremendous variety of trees, wildflowers, shrubby plants, animals, and physical features for study. A prepared brochure explaining some of the outstanding features and relationships may be obtained.

Contact: Land Laboratory Manager Willoughby South High School Shankland Road Willoughby, Ohio 44094 Phone: (216) 946-5000

LAWRENCE COUNTY

DEAN STATE FOREST

Location: On SR 93, 15 miles North of Ironton, then East on SR 373. 1,797 acres

Established in 1916, this is the second state forest acquired for timber management and wildlife protection. It is in the highly dissected Allegheny Plateau, the terrain typically rugged. It is beyond the boundary of glaciation and under-



lain by the sandstones, limestones, coals, and iron ore layers of the early Pennsylvanian age rock formations. The Vanport limestone and the Ferriferous ore associated with it have contributed much to the past wealth in Lawrence County. The forest lands on this property were cut over to make charcoal to fire the iron furnaces which operated extensively in Ohio from 1804 to 1923. A hiking trail 5.4 miles long through the hilly oak-hickory forest is recommended. A fire tower at Pilot Knob gives an excellent panoramic view of the countryside as well as an opportunity to describe methods of detecting fire, fire control, and current laws.

Contact: Manager, Dean State Forest Rt. 1, Pedro, Ohio 45659

Phone: (614) 532-7228

KITTS HILL

Location: Off SR 141, South of Kitts Hill on Sharps Creek Rd. 55 acres

This property is largely hill pasture with oak-hickory woodland and a small percentage of cropland. Located in the deeply eroded Allegheny Plateau and underlain by the sandstones, shales, limestones and coals of middle Pennsylvanian time, the area has considerable geologic interest. In addition to the woodland, five acres of land have been left to natural succession. Small stream in ravines give rock exposures and aquatic animal habitat. For a field trip to study the economics of grazing and the typical environment of the hill country, this area has merit.

Contact: Robert L. Crawford Kitts Hill, Ohio 45645 Phone: (614) 532-2938

LAKE VESUVIUS RECREATION AREA

Location: 1 mile East of SR 93, 9 mile North of Ironton. 1,000 acres

A small dam on Storm Creek created a narrow lake winding through the high rounded hills near the Ohio River. The dam is in close proximity to the Vesuvius iron furnace, one of the first productive Hanging Rock furnaces of Southern Ohio. It was an old blast furnace built in 1833 and used charcoal made from the forests of the region. This furnace lasted until 1906. The source of ore was a narrow band above the Vanport limestone of the Pennsylvanian coal series.

The area offers four excellent nature trails along the lake, through the forest, to the rock overhangs, charcoal pits and campgrounds.

For further information write or call:

District Ranger, Wayne National Forest Ironton, Ohio 45638

WISEMAN-CLARK WOODS

Location: On SR 141, 1 mile North of Wilgus. 260 acres

Most of this property is in woodland managed for wood products. The trees are in the mixed oak forest type with hickory, walnut, tulip and many other species in the association. Fifty to sixty species of wildflowers are reported in the woodland and fields. Deer, grouse and small mammals find good protection. The pileated woodpecker may be observed. The farm has two streams dissecting the Middle Pennsylvanian age sandstones, shales, limestones and coals. Outcrops of these may be found in the ravines. A pond may be used to study aquatic plants and animals. Months most desirable for field trips are March, April, May, September and October.

Contact: John C. Clark, Manager Willow Wood, Ohio 45696 Phone: (614) 643-2457

LICKING COUNTY

BUCKEYE LAKE STATE PARK

Location: South of I-70 at West side of Buckeye Lake off SR 79. 3.323 acres

This small area at the water's edge has little or no natural area but provides lunch facilities and a boat ramp. The lake of approximately 3,300 acres is of considerable interest historically and geologically. Before it was dammed to form a feeder lake for the Ohio Canal system the area was known to the Indians and settlers as a part of "the great swamp". The area was formerly a lake where clays and silts were deposited when a glacier blocked normal stream flow. Even now much of the surrounding land remains wet most of the year. Cranberry Island: (see Nature Preserve) is a floating bog in the eastern part of Buckeye Lake. It is a section of the original bog which, in 1826, broke loose and floated to the top of the newly impounded waters of "Licking Reservoir", a feeder for the Ohio (and Erie) Canal.

Contact: Manager Box 488 Millersport, Ohio 43046 Phone: (614) 467-4191

CAMP AGAPE

Located on Co. Rt. 15 off U.S. 62 and SR 657, 9 miles NW. of Newark.

40 acres (camp) - 300 acres (adjacent)

Camp Agape is situated along the Clear Fork tributary of the Licking River. This stream has dissected the glacial drift and Mississippian sandstones and shales to form a surprisingly rugged terrain. Hiking trails lead into a heavily forested area which includes pine plantings where many wildflowers and small animals may be seen. Open fields unused for years are in various stages of natural succession. The stream and a small pond provide ample aquatic habitat.

A large rustic winterized lodge contains cooking and dining facilities as well as sleeping quarters. Cabins for additional sleeping space are located near the lodge.

Contact: Lloyd D. White 495 Meadoway Park Worthington, Ohio 43085 Phone: (614) 885-6449 Or 291-2165

CAMP FALLING ROCK

Location: On County Road 21 in NE. part of county. 500 acres

Situated along the narrow valley of Rocky Fork Creek this camp lends itself well to a study of geology, botany and zoology and their interrelatedness. Large slump blocks of the



LICKING

Black Hand sandstone outcrops have been loosened by weathering from the formation and have fallen or have slid into the valley. The woodland contains the native Ohio trees of mixed hardwoods, as well as many wildflowers and shrubs associated with the weathered soils of the Illinoian glacial till. Deer, raccoon, and other small animals may be seen. This is also a good site for bird study. Buildings are not winterized.

Contact: Licking County Council, Boy Scouts of America 21 South 1st Street

Newark, Ohio 43055 Phone: (614) 345-7275

CAMP OHIO

Location: 8 miles East of Utica. 200 acres

Situated in a quiet, scenic valley in the northeast part of the county, the camp provides excellent opportunities for outdoor education. A swamp area contains cattails, sedges and rushes, a suitable habitat for aquatic animals. The winding stream and rocky ravines cut into Mississippian shales and sandstones form cliffs and rugged terrain in places. Woodlands contain many varieties of mixed hardwood trees and shrubs which shelter numerous varieties of wildflowers. Pine plantations of various ages have assisted in the succession from farmland to forest. A farm pond, natural springs and drainage ditches add to the water life environment. Two marked nature trails make identification fun and easy. Physical facilities include sleeping cabins, a large recreation hall, modern dining room, and swimming pool. Available in spring and fall only.

Contact: Manager, Camp Ohio Rt. 3, Coshocton, Ohio 43812 Phone: (614) 622-4722

CAMP WAKATOMIKA

Location NE. part of county off SR 586. 256 acres

A combination of steep wooded hillsides, Black Hand sandstone cliffs, pine plantations, sparkling Wakatomika Creek, and flood plain meadows make this campsite rich in ecologic study areas. Its physical features are a result of the fact that it is located in the foot hills of the Appalachian Plateau along the border of the Illinoian glacier which penetrated farthest into Ohio. The upland wood slopes contain large oak and tulip and other hardwoods which yield to glacial relic vegetation on the north facing slopes near the creek. In addition to hemlock, large and small, the hillsides have partridge berry and ground pine in extensive plots. Mountain laurel, orchids. marsh marigold and many other wildflowers may be observed from the well developed trails. Good conservation practices have included reforestation so that where once was eroded farmland, now grow large plantations of pine, locust and aspen, the latter reported to be the best in the state. As many as 100 bird species have been counted on the property. Two winterized lodges and sleeping cabins are available for spring and fall months.

> Contact: Camp Registrar, Heart of Ohio Girl Scout Council 4-1/2 East Park Place Newark, Ohio 43055 Phone: (614) 345-0695

THE DAWES ARBORETUM

Located 6 miles South of Newark on SR 13. 600 acres

Long recognized as a valuable site for studying native and exotic tree species, the Arboretum now is also a center of outdoor learning. The property has an administration building with a large meeting room, greenhouse, and classroom. The 350 acres surrounding it contain 2500 woody plants including a cypress swamp, an excellent selection of North American and world wide conifers and native trees in a natural woodland environment. Many specimens are spectacular botanically and historically. One of these is Franklinia. a small tree first observed growing naturally in Georgia by William Bartram in the 1700's. The tree was never located again in its natural state but this cultivated specimen speaks for its ancestor. A Japanese garden, plantations of crab apple and a multitude of other woody plants may be studied. A nature trail from which one can observe wildflowers, birds and small stream habitats winds through the many acres of natural woodland. A log cabin in the woods may be reserved by groups. A lovely 5 acre lake has a marsh vegetation at one end. One may see Mississippian sandstones and shales with fossils in some places. A naturalist educator is available for workshop and field trips. Workshops provide instruction in birds, mammals, geology, weather, plants and horticultural subjects.

Fur further information contact:

Naturalist Educator The Dawes Arboretum Rt. 5, Newark, Ohio 43055 Phone: (614) 345-2355

FLINT RIDGE STATE MEMORIAL

Location: 2 miles North of I-70 and SR 440 on Co. Rd. 668. 515 acres

Flint Ridge has much of interest for a multipurpose field trip. The irregular series of hills about ten miles in length, 515 acres of which is now a State Memorial, was mined by prehistoric Indians who came from great distances to procure the flint. This high grade, colorful mineral was deposited in a quiet sea some 200 million years ago as a result of silica saturated waters. A museum built in 1969 shows a quarry pit, demonstrates the probable method of chipping flint, explains the geology and exhibits valuable pieces of the Ohio State gem stone. A nature walk along the pathways thhrough the woodland and the quarry pits reveals many species of native Ohio trees, shrubs and wildflowers. Visitors are requested to refrain from removing pieces of flint from the park but road cuts contain good samples.

Contact: The Ohio Historical Society Columbus, Ohio 43211

Phone: (614) 469-4663

NATIONAL FISH HATCHERY

Located 1/2 mile North of Buckeye Lake on Canal Rd. Use SR 37 exit from I-70. 217 acres

The Hebron Hatchery is one of two maintained in Ohio by the federal government. The total area has about 50 acres of woods, several fields, and 40 ponds. Water for the hatchery



is obtained from a nearby section of the old Ohio Canal draining from Buckeye Lake. The ponds are used for the production of bass, bluegill, redear and catfish, with over a million of these fish used to stock ponds in Ohio, Indiana, southern Michigan and a small portion of West Virginia. The ponds provide excellent study areas for shore birds. The woodland is nesting and feeding territory for numerous forest and edge-of-forest species. Animals which may be seen are frogs, toads, turtles, raccoons and snakes. Guided tours are available if reservations are made well in advance.

> Contact: Manager, National Fish Hatchery Rt. 1, Hebron, Ohio 43025 Phone: (614) 928-8092

THE OCTAGON EARTHWORKS AND MOUND **BUILDERS EARTHWORKS**

Located on SR 16 in West Newark and SR 79 in South Newark. 66 acres

These large enclosures are parts of the Newark Group of Hopewell Indian earthworks situated on the west side of the city between the South Fork of the Licking River and Raccoon Creek. Although the expansion of the city obliterated large portions of the earthworks, these two have been well preserved. In addition many mixed hardwood trees are worth observation and study.

For maps and brochures contact:

The Ohio Historical Society Columbus, Ohio 43211 Or Miss Dora Rine 95 Cooper Avenue Newark, Ohio 43055 Phone: (614) 344-5096

WATKINS MEMORIAL SCHOOL LAND LABORATORY

Located behind high school on Vine St. in Pataskala. 50 acres

Hiking trails wind through this sizeable property used for outdoor education. Thirty acres are woodland with beechmaple climax forest and many plants and animals in association. Part is old field in natural succession with new pine plantings for reforestation. An outdoor classroom in the woods, sanitary facilities and parking at the school restrict use to school hours.

> Contact: Dale Wilson, Manager 131 Vine Street Pataskala, Ohio 43062

LOGAN COUNTY

CAMP ALFRED L. WILLSON

Location: On Lake Road off SR 68 South in Bellefor, aine. 600 acres

Three hundred year old white oak trees and a 70 acre glacial lake are outstanding features of this YMCA camp. The glacial lake is recognized as a "kettle hole", a lake created by a great chunk of ice left by the wasting glacier 11,000 or more years ago. Elk skeletons were discovered in it, an indication of climate conditions following glaciation. The camp area is largely woodland of oak-hickory association. undisturbed for many years. Wildflowers and the usual furry

animals, as well as birds, are abundant. Marginal marshlands provide another type of community for study. Glacial erratics and neutral soils over Silurian dolomite rocks are typical of the area. Two large lodges, one with food service facilities, and four new dormitory cabins are winterized. Boats and canoes may be used.

> Contact: Camp Manager YMCA 40 W. Long St. Columbus, Ohio 43215 Phone: (614) 224-1131

INDIAN LAKE STATE PARK

Location: On SR 366, 33, and 235, 6.427 acres

This 5.800 acre lake is one of the best known and most used lakes in Ohio. It was constructed on this flat glaciated till plain as a feeder lake for the Miami-Erie Canal. The marginal land at the campsites provides some marsh areas. The forest remnants on the northwest shore contain buckeye, walnut and swamp white oak. Old field type vegetation covers most of the area. A nature program is featured in the summer months.

> Contact: Manager, Indian Lake State Park Rt. 1, Huntsville, Ohio 43324 Phone: (513) 843-2098

KIRKMONT CENTER.

Location: Turn right on Logan Co. Rd. 152 at East Liberty sign from U.S. 22, to Co. Rd. 10, approximately 5 miles. 353 acres

This delightful spot situated on the third highest knob of the Bellefontaine area is rich in outdoor education opportunities. Of the total acres half are wooded. An unusual variety of trees are to be found including large oaks, beech, red elm, three species of maples. The native wildflowers and animals are abundant. Geologically, the property lies on the Bellefontaine outlier, a mass of Devonian age limestone and shale which was left by the erosional forces begun millions of years ago. At its highest point it stands 1550 feet above sea level. The limestones are not exposed on this property but trails lead to an Ohio shale cliff on the southern e. Here the typical dolomite concretions, the jointing at 1 thin bedding planes and the rounded-hill erosional pattern may be studied. A small steep ravine with a waterfall cuts through the shale; from there it meanders through the Mad River terrace and flood plain to join the parent stream which shows the profile of a glacial river. The area contains a lake and marsh lands as well as streams for aquatic studies. Indian and pionner history includes the French and Indian War, and the War of 1812. The buildings are attractive, winterized and spacious. Groups are invited for field trips as well as camping.

> Contact: Leland Duff, Resident Manager Zanesfield, Ohio 43360

Phone: (513) 593-2141



MARMON VALLEY FARM

Location: 1-1/2 miles East of Zanesfield on Co. Rd. 153. 75 acres

Although developed as a private farm camp the owners are willing to accomodate a school class for outdoor education or field trips. The farm is in the Mad River valley, called the Marmon Valley because of the pionner family by that name which settled at Zanesfield. In fact, the Indian and pionner history of the valley is unusually interesting and exciting. The river has cut through the Devonian rocks of the Bellefontaine outlier since the wasting of the last glacier. The carbonaceous Ohio shale with its springs, concretions and characteristic jointing system is exposed in the hillside at the edge of the property. Thirty-five different kinds of trees are reported on the site as well as wildflowers, wild animals, glacial boulders, a stream, a gully and a pond. Hay rides, hiking and horseback riding may be arranged. A spacious farm home, a mobile home, cabins and tents, provide living quarters.

> Contact: Mr. & Mrs. Wm. D. Wiley Rt. 1, Zanesfield, Ohio 43360 Phone: 593-4101

ROLLICKING HILLS

Located 1/4 mile East of De Graff. 160 acres

Field trips or small school camping groups in spring or fall may be arranged at this summer farm camp. The property provides an 11 acre woodland of hardwoods, a five acre farm lake, pine and hardwood plantations, field succession, contourstrip cropping, wildlife plantings, grass waterways and peat bog succession for ecologic studies and conservation practices. Soils are glacial till and lake deposits; the farm lies in the glacial boulder belt. A very large homestead and a winterized garage with fireplace and modern facilities constitute the living quarters. Horses, farm animals and small craft on the lake contribute to outdoor education possibilities. The farm is operated by a conservation oriented school principal and his wife who is a teacher.

Contact: Mr. & Mrs. Robert Smithers Rt. 2, De Graff, Ohio 43318 Phone: (513) 585-5161

VALLEY HIGH SKI AREA

Location: Off U.S. 33 SE, of Bellefontaine, 350 acres

Thir ski area is situated on the second highest point of the Bellefontaine outlier, a mass of Devonian age rock standing above the older rocks typical of the area. The property is mostly woodland except for the cleared ski slopes. Oaks are predominant but the forest type includes maple, hickory, walnut and many others. Wildflowers are abundant and deer, muskrat, raccoon and squirrels may be seen. The Mad River flows through the property; the carbonaceous Ohio shale is exposed in ravines. Hiking trails have been developed to view the ecologic features, The area is rich in Indian lore and/pioneer history. Groups may arrange to use the winterized lodge. Motel lodging is available also.

Contact: Manager, Valley Hi Rt. 3, Bellefontaine, Ohio 43311 Phone: (513) 593-2811

ZANE CAVERNS

Location: 6 miles East of Bellefontaine on SR 540. 87 acres

An ecology field trip with the purpose of determining the relationship of glacial soils over Devonian age shales and limestones, oak-hickory forest type with associated wild-flowers and animal life, and the stream erosion features to the limestone caverns below the surface might be lively and interesting. The caverns are relatively small, the trip through only 3/8 of a mile long. The solution pattern of the rocks, the fossils, stalactites and stalagmites, and the "bottomless" pit are quite worthwhile. There are beautiful woodland trails above ground. Groups are advised that the most desirable time for visitation is from April through October.

Contact: Zane Caverns Company Rt. 2, Bellefontaine, Ohio 43311 Phone: (513) 593-3777

LORAIN COUNTY

CAMP ISS-SEE-KES

Location: On Vermilion Rd., between SR 2 & 113. 40 acres

This wooded property located near densely populated urban areas has many natural features making it advantageous. It lies on the Vermilion River which has eroded deeply through the Berea sandstone and Devonian shales to make good geologic studies. The region is glaciated and the old beach ridges of former levels of Lake Erie may be observed. The woods are composed of mixed hardwood trees with wildflowers displayed in season. The camp has hiking trails, a dining lodge with cabins and tents for sleeping. The Elyria YMCA invites groups in accordance with YMCA policies to use the camp. School groups on field trips only will not be charged.

Contact: Camp Director, Camp Iss-See-Kes YMCA, Third and Court Streets Elyria, Ohio 44035

Phone: (216) 322-4600

CLARE-MAR CAMP

Location: 1-3/4 miles West of SR 58 on New London-Eastern Rd. 152 acres

This recreation property has many valuable features for outdoor education. It lies on a glacial plain just north of the Defiance moraine and the divide separating the waters flowing into Lake Erie and those to the Ohio River. The beechmaple woodland on and near the large lake also contains oak, hickory, basswood, cottonwood, dogwood, and other flora native to northern Ohio. Small mammals and occasional deer, fox and great horned owls are seen.

Boat rentals and hayrides may be arranged. No fee is necessary for nature study only.

Contact: Manager, Clare-Mar Camp Rt. 1, New London, Ohio 44851 Phone: (216) 647-3318





FINDLEY STATE PARK

Location: On SR 58 South of Wellington. 917 acres

This park is situated on a level glaciated plain with thick glacial till overlying the Mississippian age sandstone below. The Wellington Creek dam has created a 93 acre lake which has a beech-maple forest and a 30 year old pine plantation around it. An excellent display of wildflowers are found seasonally in the deciduous woodland where walnut, hickory, tulip, ash, oak and dogwood are associated with the beech and maple. Migrating ducks, songbirds and small mammals including deer may be seen.

Contact: Manager, Findley State Park Rt. 3, Wellington, Ohio 44090 Phone: (216) 647-4490

FIRELANDS RESERVATION

Location: On Gore-Orphanage and Becker Rds. West of Oberlin, 300 acres

This Boy Scout property has an exceptional number and variety of trees, flowers and shrubs. The majority of the land is wooded in the beech-maple forest type with ash, oak, and tulip in the association. Twenty-five acres have been planted in conifers, A 20 acre pond, a small river and a swamp give ample environment for studying aquatic plants and animals. The property lies on glaciated land, the ice sheets leaving a variable but thin coating of deposit. The Berea Sandstone of Mississippian age outcrops in the region where the river has eroded through the formation. The camp is used for the I orain County Youth Conservation Camp with good reason. A winterized lodge and cabins have been constructed recently.

Contact: Scout Executive, Firelands Area Council Boy Scouts of America Box 414, Sandusky, Ohio 44870 Phone: (419) 625-4836

LORAIN COUNTY METROPOLITAN PARKS

Created in 1957 at the request of a large number of county groups interested in land conservation and outdoor recreation, this park district is moving forward to develop a master plan of considerable magnitude. Ten sites have been selected with a planned acreage of 10.369 acres. Development in three parks will be described.

For all three contact:

Director Lorain County Metropolitan Park District 126 Second St., Elyria, Ohio 44035 Phone: (216) 322-7800

Carlisle Reservation

Location: On U.S. 20, 5 miles SW. of Elyria. 572 acres

Situated in the very center of the county this site will have a large scale park development with an impoundment on the West Branch of the Black River when finances permit. At the present time a farm house is being used as an outdoor education center. It contains an assembly room for 30 people. The property is abandoned farm and pastureland, having flood plain woods with abundant wild flowers. It lies on the glaciated, relatively smooth glacial till plain with a thin coating of drift, averaging not more than 25 feet. The Berea Sandstone is just below the glacial deposits and outcrops in the stream bed.

Charlemont Reservation

Location: Between SR 58 and 511 on New London Eastern Rd. 452 acres

Use of this site is not encouraged until facilities can be installed. It is largely abandoned farm and pasture land and cut over forest now left to natural succession. Small streams and a lake provide habitat for the study of aquatic plants and animals. Observation of the site over a period of time might be a challenging research project. A farm house and barn provide the only shelter.

Mill Hollow-Bacon Woods Park

Location: North Ridge Rd., Brownhelm Twp. 217 acres

This site is on the Vermilion River, half of it left in its natural state which is mostly flood plain forest and wooded hillsides. The area has been glaciated and subsequently dissected by the river and its tributaries, forming shale cliffs and narrow sandstone outcrops. Marked nature trails have guides available at the nature center. An historic museum, a deer run, a duck-pond, picnic areas, and camping sites are added features for study and convenience. There is no charge for school groups on school time.

WELLINGTON RESERVOIRS

Location: On Jones Road, South of Wellington, 155 acres

Two reservoirs for water supply, Charlemont Creek, a good wooded area, pine plantations ranging in age from 5 years to 30 years, and fields in natural succession provide good study possibilities in the three major habitats. The woods are beech-maple forest type with many species in-



LORAIN-LUCAS

cluded and wildflowers may be observed in season. The area is on glaciated, level till plain, with deposits as deep as 105 feet. The creek has typical erosional and depositional features and transported rocks.

Contact: Manager, Wellington Reservoirs 98 Johns St.

> Wellington, Ohio 44090 Phone: (216) 647-3927

WELLINGTON WILDLIFE AREA

Location: On SR 58, 5 miles South of Wellington. 201 acres

Across from the state park is a wildlife area which was the original state game farm purchased in 1917. The artificial propagation of game birds was discontinued in 1960. The land has been glaciated having a gently rolling topography. The soils are acid and poorly drained. Two small ponds provide fishing or habitat for studying aquatic plants and animals. Pheasant, quail and furbearing mammals are common to the area. This is a good property to observe wildlife, soil and water management practices.

Contact: Division of Wildlife District 3 Office 912 Portage Lakes Drive

Akron, Ohio..44319 Phone: (216) 644-2293

LUCAS COUNTY

CRANE CREEK STATE PARK

Location: Off SR 2 midway between Port Clinton and Toledo.
72 acres

Crane Creek State Park is reached by a road running through Magee Marsh. A bird trail where many species can be seen extends from the parking lot through a marshy area behind the beach and picnic areas. This is an outstanding area for shorebirds and waterfowl. There is a natural sand beach which is shaded by many large trees, mostly cottonwoods. The vegetation is typical of that found in association with Lake Erie; in addition there are many grasses, with sedges in the marsh area. A new nature interpretive center and waterfowl hunting museum is being completed. A full-time naturalist is available in all seasons except during waterfowl migration.

Contact: Manager, Crane Creek State Park

Oak Harbor, Ohio 43449 Phone: (419) 897-2524

GEORGE P. CROSBY PARK & GARDENS

Location: 5403 Elmer Drive, Tolcdo, Ohio Off Reynolds Road, one block South of U.S. 20. 28 acres

This land was willed to the city by Mr. Crosby and plans are being made to purchase adjoining properties. A new master plan includes a botanical garden and passive recreation area. An ecological study area for grade and high school students, a conservatory and a greenhouse facility are to be developed, also.

Children's gardens planted and maintained under adult supervision were planted for the first time in 1969, and the program is to be continued each year. A horticulturist is on duty at the park daily from 8:00 A.M. to 4:00 P.M. and conducts classes in flower arrangement and on horticultural subjects. A small horticultural ilbrary is open to the public as is the park. Special tours will conducted by appointment.

Contact: Horticulturist, Division of Forestry 5403 Elmer Drive Toledo, Ohio 43615 Phone: (419) 536-1031

MAUMEE VALLEY DAY SCHOOL OUTDOOR LABORATORY

Location: 1 mile North of Ohio Turnpike on U.S. 25 in Toledo. 20 acres

This area is adjacent to the newly acquired Swan Creek Metropolitan Park. It is largely bottomlands with slopes through which Swan Creek runs. There are good stands of native deciduous trees and it is excellent for spring wild-flowers. There is an abundant small mammal population and a variety of birds. There are hiking trails although there is no guide service.

Contact: Ronald Euton Maumee Valley Country Day School Maumee, Ohio 43537 Phone: (419) 893-3381

MEDUSA PORTLAND CEMENT COMPANY QUARRY

Location: Brint Rd. North of Centennial Rd., West of Toledo by way of Sylvania Ave. 80 acres

Dundee limestone and dolomite make up the sloping base of this quarry, capped by the Silica formation which is composed of alternating units of shale and limestone. The lower units of the formation are highly fossiliferous, containing fossils of corals, clams, brachiopods, bryozoa, and trilobites.

Due to the extensive mining operations here, 29 layers can be seen and the quarry is a mecca for the fossil hunter. The giant trilobite "Phacops milleri" is especially frequent although the fossil hunter who finds one intact is fortunate. Fossil hunters from all over the world visit the quarry. Visitors are welcome on Saturday and Sunday only.

Permission must be obtained from the quarry office at Centennial Road, south of Sylvania Avenue. It is necessary for visitors to sign liability release forms for the Company. Members of Toledo Naturalists' Association will conduct guided tours upon request.

Contact: Medusa Portland Cement Company P.O. Box 310, Sylvania, Ohio 43560 Phone: (419) 841-3324 and: Sanctuary Chr., Toledo Nat. Assn. 3831 Homewood Avenue, Toledo, Ohio 43612 Phone: (419) 475-7012

METZGER MARSH WILDLIFE AREA

Location: Off SR 2, 1 mile East of Bono. 558 acres

Situated in the southeast corner of the county near Lake Erie the area is about evenly divided between open water and cattail marsh. Open to the lake, the marsh is subject to



fluctuating water levels. A large variety of waterfowl and shorebirds are present during spring and fall migrations. Blanding turtles are found; other aquatic animals are abundant. Many fish species including goldfish and fresh water drum are present. For waterfowl study the period from March 1 to December 30 is recommended.

Contact: Division of Wildlife District 2 Office 952 Lima Ave.

Findlay, Ohio 45840 Phone: (419) 422-6757

OTTAWA PARK

Location: In City of Toledo, bounded by North Cove Blvd.. Toledo Terminal Railraod, Bancroft St., Ottawa Drive and Upton Ave. 300 acres

This is the largest of the Toledo City Parks. Ten Mile Creek meanders through it contributing to the varied terrain. This includes gently rolling hills and bottom lands. There are several wooded areas with trails, one of which is a self-guided nature trail, one and one half miles long through the bird sanctuary area. An outdoor amphitheater offers free programs during the summer season. Tennis courts, a golf course, recreation fields and play areas are located here.

Walden Pond is open to children for fishing. The shelter house is reservable except during the summer recreation program. There is an established Wildflower Garden in the park. A naturalist is employed by the Division of Recreation.

Contact: Commissioner, Division of Recreation 2201 Ottawa Dr. Toledo, Ohio 43606

Phone: 475-9331

TOLEDO METROPOLITAN PARKS

The Metropolitan Park District has established eight parks comprising approximately 5,000 acres of land. Oak Openings Park with its bountiful wildlife, 12 miles of hiking trails and its fascinating geologic history is the main attraction for naturalist, botanist, and ornithologist. Several other park areas are located on the scenic and historic Maumee River. Each is somewhat different from the other and together provide an excellent variety of experiences for outdoor education. A description of each follows. Unless otherwise indicated, for information, reservations, and naturalist services, contact:

Toledo Metropolitan Park Board Office 911 Madison Avenue, Toledo, Ohio 43624 Phone: (419) 248-5911

Canal Lands Metropolitan Park

Location: Extend from Side Cut Park SW. along the Maumee River to Providence Park. 140 acres

Abandoned lands of the Miami-Erie Canal were leased from the State of Ohio in 1932 by the Toledo Metropolitan Park Board. They were leased for the term of 99 years, renewable forever. A variety of birdlife can be found in hiking this towpath, as well as the typical vegetation found in the bottom lands of this area. Members of the Toledo Naturalists' Association are available for interpretive tours.

Farnsworth Metropolitan Park

Location: On U.S. 24, 1 mile SW. of Waterville along the Maumee River. 40 acres

This park is a narrow belt of attractive, though man-manicured, land, most of which lies on a bluff some 30 feet above the river. Park area is dotted with trees and shrubs. A hiking trail along the old canal tow path, an enclosed shelter, a Boy Scout camping area, and four adirondark shelters might be useful.

Northeast of this park the Bowling Green fault in the Bass Island dolomite may be observed. This is reached by walking down the river bank to a culvert. There are not very many places in Ohio where a rock fracture zone along which there has been a displacement of the sides relative to one another parallel to the fracture may be observed. The area is brushy, a small number only being able to view it at one time.

Contact: Manager, Farnsworth Metropolitan Park Rt. 1, Box 151 Waterville, Ohio 43566 Phone: (419) 878-7641



Oak Openings Metropolitan Park

Location: Three miles West of Toledo Express Airport; lies within the following roads: U.S. 20 (Airport Hwy) on the North; Wilkins Rd. and SR 295 on the East; SR 64 on South and West.

3,200 acres

Oak Openings Park is completely within the area known geologically as the Oak Openings, an area of thick sand which was at one time the beach ridges of glacial Lake Warren. The typical habitat is a combination of wet and dry places side by side. This has led to the natural occurrence of the unusual plants for which the Oak Openings is famous. Where the surface of the sand is low, swamps are present; where high, it is extremely dry. Here are found the only active or moving sand dunes in the state of Ohio. Some of the rare flowers found here are queen of the prairie, blazing star, lance leafed and bird's foot violet, mountain phlox, gentian



and others. Because of the presence of some of the nation's rarest wildflowers and most unique ecosystems, it is a favorite area for wildlife enthusiasts.

Naturalists conduct Sunday afternoon walks from the Lodge and are available on a fee basis to conduct walks and give lectures for groups who reserve the Lodge. The Lodge has overnight dormitories and catered food service on a reserved basis. There are three lakes, Mallard, Evergreen, and Springbrook, where there are picnic areas and in which one can fish. Thirty miles of hiking trails and 20 miles of horseback riding trails are within the park. There is a display of native whitetail deer in the Mallard Lake area, and ducks on this lake. There is also ice skating here in season. It is an interesting area for the study of birdlife also.

Pearson Metropolitan Park

Location: On SR 2, 2 miles East of the Detroit-Toledo Expressway, within the city limits of Oregon, Ohio. 320 acres

Pearson Park is the most developed of the Toledo Metropolitan Parks. There is fishing for children on the lake, ice skating in season, pedal boats for rent during the warm months. Macomber Lodge can be reserved for meetings and programs.

Spring wildflowers can be seen along the trails and it is an excellent area for migrating bird species with some nesting species.

Bicycles can be rented to ride the 3-1/2 mile bike trail. Two horse trails start from the stables where horses are available and there are four hiking trails. A refreshment stand is open during the summer months. Day camp facilities are maintained here.

Providence Metropolitan Park

Location: On Route 24 along the Maumee River, across from Grand Rapids, Ohio.

40 acres of land: 260 acres of slackwater pool of the Maumee River.

Providence Park is in the bottom land along the Maumee River. The slackwater pool served as a reservoir to control the water level in the Miami-Erie Canal. It is leased by the state of Ohio to the Toledo Metropolitan Park District along with other abandoned canal lands. Fishing can be done from the banks as well as in the rapids below the Providence Dam. The old canal towpath extends northeast from the park and provides excellent hiking. Tree cover here is mainly cottonwood and sycamores. The historic Heising Mill and Peter Manore House are adjacent to the park.

Secor Park and Arboretum

Location: On Central Ave., 8 miles West of Toledo. 500 acres

Secor Park is on the edge of the Oak Openings area and has plant and animal life typical of both heavy clay and light sandy soils. When the last glacier wasted back it left the northern part of the park lying under the waters of lowest Lake Warren, an earlier phase of Lake Erie. Large amounts of clay carried in suspension by the glacial waters slowly settled on the lake bottom, as sand deposits accumulated on the shore. This sand, driven by wind and waves, was heaped up in low dunes which can still be found in the southern section of the park. The preserved woodland lies in the lower

half of the 500 acres characterized on Dogwood Trail by the magnificent specimens of tulip, oak, basswood, black gum, and red maple towering over a dense understory of dogwood, spring wildflowers, ferns, and small furry animals. Many birds are at home in the tall trees. Separating the sand dunes are swamp forests of ash, cottonwood, and maple with mixed hardwoods, oak dominant, on the stabilized dunes.

The northern part has been developed into an arboretum where there are many varieties of trees and shrubs which can be grown in the Toledo area. A natural environment interpretive nature center has outstanding exhibits, two lecture halls, and a fully equipped kitchen. A native wildlife village features wild animals. Four hiking trails, bike trail, and a selfguiding nature trail give a great variety of exploring experiences. A park naturalist is on duty the entire year.

Side Cut Metropolitan Park

Location: Along the Maumee River, lower parking lot on West Broadway, West of Conant St. within the City of Maumee; upper parking lot off Anthony Wayne Trail. 90 acres

Side Cut Park is on the Maumee, mostly in the flood plain with the higher portions of the park on a ridge which borders the river at this point. Three historic locks of the Miami-Erie Canal are preserved here. The canal towpath extends in both directions along the river from this park and provides excellent hiking. There is fishing in Silver Lake as well as in the Maumee River and ice-skating in season.

Swan Creek Metropolitan Park

Location: In the City of Toledo, bounded by Airport Hwy. on the North, Glendale Ave. on the South, Eastgate Rd. on the West, and Byrne Rd. on the East. 410 acres

The Toledo Metropolitan Park Board recently has completed the acquisition of this park. The area is at present undeveloped. Slopes which face in four different directions plus the bottom lands in the flood plain of Swan Creek contain a wide variety of plant life. The area is one of the most primitive and untouched sections of bottom land in the Toledo area. Birds found here are swamp forest types which make up the majority of our breeding song bird species. Tall poplars, maples, oaks, sycamores, and some nut trees are in the heavily wooded areas. Three kinds of trillium, hepaticas, and Indian pink are among the wildflowers here. The abundant wildflowers and many forms of wildlife in a varied topography make it highly desirable as a metropolitan park. There are unimproved trails along Swan Creek which a hardy hiker can explore.

MADISON COUNTY

CAMP MADISON LAKE

Location: Off SR 665 on Madison Lake. 1-1/2 acre

A very small plot has been developed on the lake shore by Boy Scouts for tent camping or sleeping in adirondack shacks. The area adjoins the state park and private boat rental is nearby. See park description.

> Contact: Central Ohio Council, Boy Scouts of America 1428 E. Broad St. Columbus, Ohio 43205 Phone: (614) 253-5513



MADISON LAKE STATE PARK

Location: On SR 665 East of London. 180 acres

Park land with sparse vegetation surrounds a 100 acre lake formed by a small dam on a tributary of Deer Creek. A mixed hardwood woodlot may be observed near the picnic area. Of interest is the fact that the region was heavily glaciated by both ice sheets, Illinoian and Wisconsin, leaving a thick coating of drift varying from 80 to 200 feet in thickness. The edge of a moraine is just southwest of the park. Soil studies indicate high lime till which is poorly drained. The lake and creek could be used for study of aquatic plants and animals, the creek for erosional and deposition features.

Contact: Manager, Madison Lake State Park Rt. 4, London, Ohio 43140 Phone: (614) 852-2919

PINE TREE TRAIL

Location: 3 miles South of West Jefferson. 40 acres

Pine Tree Trail has been developed for teaching basic conservation, biology, forestry, wildlife management, water and soil conservation. Demonstration and outdoor classrooms are provided. Varied tree species are present and the woodland abounds in wildflowers and other plants. The song and game bird population is reported to be outstanding. Wildlife nesting areas are unusually good. The property contains a natural flood plain of a glacial stream with the typical features present. The glacial drift is thick, the soil high in lime content. Elementary classes and college students have visited "the trail" for observation and study. Advance registration of at least 45 days prior to date of the trip is required. Property has a club house and other facilities, among them a fire ring for council and cooking fires. There is no charge for school groups. Overnight school camping may be arranged upon special request in months of March through June, September and October.

> Contact: Herb Rumfield, Director 387 Westwood Dr., Rt. 1 Galloway, Ohio 43119 Phone: (614) 879-8188

PROCTER CONFERENCE CENTER

Location: On SR 38, 9 miles South of London. 23 acres

This property with winterized lodge and cabins is a church retreat. It is situated in an area of ecological interest which might well be studied from the Center. It lies on a thickly coated glaciated plain near the Bloomingburg moraine and a boulder belt which extends in a lobe south and east. The moraine deposit indicates a halt in the wasting back of the Wisconsin ice sheet emphasized by the large number of boulders associated with it. The underlying rocks are Silurian dolomite, the soil high in lime content. Of interest also is the fact that the region originally contained plots of prairie, remnants of which might be found. The site is largely lawn and meadow, some of which is reported to be left in a natural state. There are trees in the oak-hickory association, some

wildflowers and animals. A pond provides habitat for aquatic plants and animals. For information on field trips or school camping contact:

> Manager, Procter Conference Center Episcopal Church, Diocese of Southern Ohio P.O. Box 202, London, Ohio 43140 Phone: (614) 852-5258

MAHONING COUNTY

BERLIN RESERVOIR WILDLIFE AREA

Location: On SR 224 North of Alliance. 6,763 acres

This large reservoir and surrounding territory was glaciated by the Wisconsinice sheet. The area is on the relatively smooth Allegheny Plateau dissected by the Mahoning River. The soils are acid and poorly drained; three marshes are scattered throughout. There are a few timber stands in both the beech-maple and swamp forest type where wildflowers are abundant in the spring. A large number and variety of waterf owl may be seen in the spring but the fall migration is not as spectacular because of severe water drawdown. Furbearers are common and especially interesting is a beaver colony on the area. Nesting woodcock are found also. Parts of the property are noted for warblers during migration periods. Fish, wildlife, forestry, soil and water conservation practices may be studied.

Contact: Division of Wildlife District 3 Office 912 Portage Lakes Drive Akron, Ohio 44319 Phone: (216) 644-2293

CAMP LEXINGTON AND CHRIST MISSION CAMP

Location: 14 miles SW. of Youngstown near Canfield. 170 acres

The combined facilities and acreage of these two camps make field trips or school camping attractive. Camp Lexington has 100 acres of native woodland in the mixed oak forest type which includes many species. Wildflowers, birds and small mammals are abundant. The area has been glaciated but the Wisconsin ice sheet left only a thin coating of drift. Streams have eroded through this material to the Pennsylvanian rock strata below. The 70 acres at Christ Mission are open fields in succession providing another basic habitat for study. Trails extend from one camp to the other and through the woodland. A dining hall and living quarters under one roof, swimming pool, craft lodge and auditorium constitute the centralized facilities. There are three outpost locations for primitive camping.

Contact: Camp Director, Clarence Robinson Center 1705 Oakhill Ave., Youngstown, Ohio 44507 Phone: (216) 743-1374

HOLY FAMILY SCHOOL LAND LABORATORY

Location: On U.S. 224 .07 mile East of Poland proper. 7 acres

This outdoor education property is wooded with oaks and sugar maples as well as many other species. Wildflowers are abundant and furbearing animals may be observed. A stream, adjacent to the property, provides creekside studies.



MAHONING-MARION-MEDINA

The area has been glaciated and has a thin covering of glacial deposits. The underlying rock strata are Pennsylvanian in age, the lower Mercer limestone outcropping in the stream bed at an elevation of 990 feet. A winterized lodge is available. For observation or a class visit contact:

Manager, Holy Family School Land Laboratory Diocese of Youngstown, 221 Center Road Poland, Ohio 44514 Phone: (216) 757-1545

MILL CREEK PARK

Location: In the city of Youngstown and Boardman Twp. 2,389 acres

Termed "a scenic oasis in an industrial valley" Mill Creek Park has been preserved for its natural beauty and for recreational purposes since 1891. The park begins where Mill Creek joins the Mahoning River and runs southward along a deep gorge for seven miles. Geologically the rock exposures indicate that both Misssissippian and Pennsylvanian formations are present, the resistant layers responsible for the waterfalls in the gorge. Three lakes, numerous ponds, swamps as well as the river provide plenty of water for boating and for the study of aquatic plants and animals. Replicas of old stern-wheel river boats are used for sight seeing. The wooded hillsides are covered with oak-sugar maple forest type with walnut, hickory and many other species observable. Hemlock as glacial relic vegetation persists in the cool, moist gorge. Trained naturalists conduct nature walks along the extensive trails where wildflowers, shrubs, birds and trees are found. They also acquaint visitors with the history of the region. A 120 year old mill houses the parks outstanding nature museum. Picnics may be held in Pioneer Pavilion, a one time woolen mill built in 1821. For field trip arrangements in spring or fall contact:

> Superintendent, Mill Creek Park Youngstown Township Park District 816 Glenwood Ave., Youngstown, Ohio 44502 Phone: (216) 744-4171

MILLWOOD CAMP

Location: Off SR 18 near North Jackson. 60 acres

This Girl Scout camp lies on the glaciated, relatively smooth Allegheny Plateau. A creek running through the property has dissected the glacial drift to expose the Pennsylvanian age sandstones and limestones. A large portion of the property is wooded, oaks predominating. A winterized lodge with food service facilities and tent units comprise the living facilities. Field trips or possibly school camping may be arranged when scouts are not using the property.

Contact: Camp Registrar, Lake-to-River Girl Scout Council 55 S. Main St., Niles, Ohio 44446 Phone: (216) 652-5877

MARION COUNTY

BIG ISLAND WILDLIFE AREA

Location: On SR 95, 5 miles West of Marion. 1,043 acres

This property is very flat with dominantly dark colored, poorly drained soil formed from clay. The soil type is similar to some of those found in the old lake-bed region of northwestern Ohio. The underlying rocks are thin bedded dolomite

of the Tymochtee member of the Monroe formation. Eight ponds have been constructed on the acreage to attract waterfowl. Pheasant, quail, doves, fox squirrel, raccoon and woodcock inhabit the area. Deer are seen occasionally. Situated in one of the larger plots of original prairie vegetation, remnant plants are found. Wildlife, soil and water conservation practices are being applied.

Contact: Division of Wildlife District 1 Office 1500 Dublin Rd., Columbus, Ohio 43212 Phone: (614) 469-3337

OWENS BOY SCOUT CAMP

Location: Off SR 423, 5 miles South of Marion. 55 acres

Mostly wooded with large mixed hardwoods and conifer plantings, this camp is a good site for field trips. It is located on flat till plain, the soils generally thin, with high lime content. A small stream dissects the plain to form a little topographic relief and expose the Devonian age limestones below. A 3/4 acre pond provides habitat for aquatic plants and animals. Hiking trails have been developed along the stream and in the majestic woodland.

. For information or arrangements contact:

Manager, Owens Boy Scout Camp 217 W. Church St., Marion, Ohio 43302 Phone: (416) 382-4142

MEDINA COUNTY

CAMP CRAG

Location: On Parker Rd. SE. of Hinckley. 67 acres

Named for the caves, crevices and crags of Whipps Ledges nearby, this camp has served the youth of the county and Ohio since 1921. It is situated on a loop of the East Branch of Rocky River. The area is glaciated with the stream full of rocks carried by the ice sheet. The Sharon conglomerate, a basal formation, deposited at the beginning of the Pennsylvanian series, is exposed on the hillsides above and is responsible for the rugged, rocky hillsides. The area is largely wooded in the mixed hardwood forest type and has some unusually large tree specimens. It adjoins the Hinckley Reservation of the Cleveland Metropolitan Parks and hiking trails extend into this area. Modern facilities have been added since the early days, but the camp retains its natural, secluded atmosphere. April, May, June, September, and October are recommended for field trips. School camping may be negotiated.

> Contact: YMCA Secretary 124 North Elmwood Avenue Medina, Ohio 44256 Phone: (216) 722-0383

CHIPPEWA LAKE PARK

Location: East of U.S. Rt. 42 North of Lodi. 486 acres

Reported to be the largest existing glacial lake in Ohio, this one provides some interesting habitats for study. The inlet and outlet streams, marshland, sand beach and a small



amount of woodland are study possibilities. Access may be made at the park which is primarily for recreation. Boats may be rented.

Contact: Manager, Chippewa Lake Park Chippewa Lake, Ohio 44215 Phone: (216) 668-2481

HINCKLEY RESERVATION

Location: Reached from Bellus Rd. North, Parker Rd. on East, Ledge Rd. on South or Co. Rd. 44 right through the middle. 1.890 acres

This property is a southern extension of the Cleveland Metropolitan Park "Emerald Necklace". It is a fascinating area geologically because it contains excellent exposures of the Sharon formation, a basal conglomerate of the Pennsylvanian period. A section of the park known for generations as Whipps Ledges has foot paths winding through the large slump blocks as well as the bedrock in place. The hillsides have fine examples of beech-maple climax forest and the associated flora and fauna. The East Branch of Rocky River has been dammed to create a sizeable take which with the stream gives many sites for observing water plants and animals. The great variety of habitats produces a good bird population. Of outstanding interest is the large number of buzzards which return each year to nest at or near Buzzard Roost.

YMCA Camp Crag is in the southeast corner of the area.

Contact: Cleveland Metropolitan Park District 2048 Standard Building

Cleveland, Ohio 44113 Phone: (216) 621-1034

MAPLE LAKES

Location: Left off SR 3 on Blake Rd., 7 miles South of Medina.
120 acres

This recreation area established around two lakes contains a forest of 700 maple sugar trees with a seasonal display of wildflowers associated with them. The property lies on the glaciated, ge.:cly rolling till plain with Mississippian age sandstones and shales beneath the thick glacial deposits. Soils are dominately acid. The lakes, fields and woodland provide the three major habitats for studying plants and animals.

Contact: Manager, Maple Lakes Rt. 1, Seville, Ohio 44273 Phone: (216) 769-4139

SPENCER LAKE WILDLIFE AREA

Location: Off SR 162, 2 miles NE. of Spencer. 595 acres

A 70 acre lake formed on the East Branch of the Black River is the most outstanding physical feature of this reserve. The land is glaciated, gently rolling; the soils are acid and poorly drained. The lake attracts a variety of waterfowl during migration periods. Wood duck, mallard and teal nest on the site. Rabbit, squirrel, pheasant, quail and furbearers are common. A large part of the property is wooded in pre-

dominately beech-maple forest type with scattered stands of oak-hickory. Fish, wildlife, soil and water mangement practices may be seen. Facilities are limited to parking and a boat ramp.

> Contact: Leonard E. Porter Manager, Spencer Lake Wildlife Area Rt. 2, Seville, Ohio 44273 Phone: (216) 644-2293

WILDWOOD LAKES

Location: 1 mile South of U.S. 224 at Homerville, then 1 mile East. 180 acres

The three small lakes, a stream, 15 acres of woodland and open fields comprise the three major habitats for studying plants and animals. This camp grounds lies on glaciated, slightly rolling land. The wooded area is the beech-maple forest type with many species of trees, shrubs and wildflowers in the association. Hiking trails have been developed making a reasonably good field trip possible.

Contact: Manager, Wildwood Lakes Rt. 1, Homerville, Ohio 44235 Phone: (216) 625-2467

MEIGS COUNTY

BUFFINGTON ISLAND PARK

Location: At Portland on SR 124. 5 acres

This small park commemerates two of the invasions of the north by confederate forces during the Civil War. It is the only Civil War battle site on Ohio soil. An Indian Mound and the McCook Memorial add to the interest of the Ohio River site. Trees, flood plain, and river may be observed also. For further information, contact:

> Ohio Historical Society Columbus, Ohio 43211

CAMP KIASHUTA

Location: 2 miles SE. of Chester off SR 7. 125 acres

The development of this secluded Boy Scout camp was begun in 1934 by W.P.A. funds and labor. The camp is situated on the high wooded hills and the deep valleys typical of areas along the Ohio River. Shade River runs through one corner of the property. A suspension cable foot bridge makes the total acreage accessible. The woodland is in the oak-hickory forest type; no recent timbering has taken place which has permitted the trees to grow to a fairly large size. Topped by residual acid soil underlain by Permian age sandstones and shales the resulting flowers and shrubs are typical of southern Ohio. The area was named for Indian Chief Kiashuta who met and camped with Col. George Washington nearby, according to the first president's dairy. A marker may be seen along SR 124 in the Ohio River valley. A large cabin with fire places and electricity and marked and unmarked hiking trails are available.

> Contact: Manager, William R. Knight 2903 Parrish Avenue Point Pleasant, W. Va. 25550



FORKED RUN STATE PARK SHADE RIVER STATE FOREST

Location: Park on SR 124; forest west & north of SR 124. Park-794 acres Forest-2,409 acres

A sense of space and timelessness accompanies one who explores these many acres. The Shade River watershed is west of the Ohio River as it meanders through a wide valley. But the topography consists of high hills, and narrow valleys with the stream eroding through the Permian age rocks to the upper Pennsylvanian sandstones and shales below. Outcrops of massive sandstone occur along the Ohio valley and in the ravines. Forked Run State Park has an outstandingly beautiful campground on the hilltops overlooking the countryside. Much of the area is wooded although old fields remain as evidence of rather futile farming. The primary forest type is oak-hickory, but beech is prominent in places. Flowers, birds and other animals may be observed from the hiking trails. Spring and fall are the most delightful seasons for field trips.

> Contact: Manager, Forked Run State Park Rt. 1. Reedsville, Ohio 45772 Phone: (614) 378-6206

HIDDEN LAKES

Location: 1 mile East of junction of U.S. 33 & SR 7, off SR 7. 70 acres

Tucked behind the Forest Run Block Company is a secluded area with many choice kinds of wildlife to study. Two small dams have impounded lakes which are stocked with fish and on whose waters migrating waterfowl such as hooded mergansers may be found in early spring. Fifty five acres of woodland of mixed hardwoods along the valley and on the hillside provide habitat for a wide variety of birds. Two pileated woodpeckers have been seen close to the roadway. Wild turkey and grouse are reported to be abundant but are hard to see, Deer, mink, muskrat, raccoon and even bear are in the area.

The season is from April to November.

Contact: Manager, Hidden Lakes Box 222, Pomeroy, Ohio 45769

Phone: (215) 992-6384

ROYAL OAK PARK

Location: On Wells Rd., off SR 7, 4 miles NE, of Pomeroy. 130 acres

This park is a well developed camp ground where some good forest land has been retained in the ravines and on a hilltop bordering the campground. One camping area is wooded with large white oak trees. Other forested parts of the park are also in the oak-hickory association. Wildflowers, birds and small mammals are abundant. A small lake with a marsh area at one end provides habitat for water plants and animals. Classes are invited to visit the owner's farm where Hereford cattle, horses and ponies are among the animals to be seen. The camping season extends from May to November.

> Contact: Horace Karr Star Route, Pomeroy, Ohio 45769 Phone: (614) 985-3341

SOUTHEAST BRANCH, OHIO AGRICULTURAL RESEARCH & DEVELOPMENT CENTER

Location: On SR 142 near Carpenter, 3-1/2 miles South of Albany. 330 acres

A tractor-wagon tour may be arranged to explore this large experimental farm. The property has been state owned since 1902 when it was donated by Senator Carpenter, One hundred acres are in pine and hardwood forest with nature trails going through. Another 100 is devoted to agronomy practices with research on small grains and forage. Here and in the wildlife area various conservation practices such as erosion control and diversion ditches may be observed. Three ponds and a spring provide water and habitat for aquatic plants and animals. Pasture research is conducted on another 100 acres with 160 head of Hereford, Angus, Clarolais, and crossbred cows. Visitation may be made from April to October.

> Contact: Manager, SE. Branch, OARDC Rt. 2, Albany, Ohio 45710 Phone: (614) 698-4521

MERCER COUNTY

GRAND LAKE ST. MARYS STATE PARK

Located on SR 29, West of St. Marys. 13,995 acres

This large artificial lake of approximately 13,500 acres was built originally as a feeder lake for the Miami-Erie Canal. The area is more interesting historically than as a natural environment but does contain two excellent wildlife preserves; one is the State goose refuse on the south side of the lake, the other a state fish hatchery on the east side. Waterfowl and shorebirds are numerous. The park facilities are available for groups visiting any part of the area. facilities are available for groups visiting any part of the area.

> Contact: Manager, Grand Lake St. Marys State Park Box 308

St. Marys, Ohio 45885 Phone: (419) 394-3611

Phone: (419) 586-6132

MERCER COUNTY WATERFOWL REFUGE

Location: SW. corner of Grand Lake St. Marys. 1.000 acres (700 acres water)

Two aspects of this refuge are particularly interesting. First is the large variety and number of waterfowl, especially during spring and fall migration which feed and/or nest there; and secondly, the cultivation of crops to feed them. Lying on a glaciated plain underlain by the Niagara dolomite of Silurian. age and containing soils of high lime content, the land should be able to supply ample grain for the birds. In addition to the migrating waterfowl, Canada geese, mallard, wood duck and smaller numbers of other waterfowl nest there. The 700 acres of water in the refuge include 8 ponds and one channel. The area should be very productive for studying waterfowl and other aquatic animals and for plants as well. The refuge is open only on special days during the year from June 1 to March 31.

Contact: Manager, Mercer County Waterfowl Refuge Rt. 5, Celina, Ohio 45822

MIAMI COUNTY

CAMP INDIAN HILLS

Location: Off SR 718, 1 mile West of Pleasant Hill. 52 acres

Advantageously situated on the Stillwater River which gives diversity of habitat and topography to the site, this camp is a fine study area. Twenty acres are woodland and prairie left in a natural state in order to attract wildlife. Additional land contains plantings of multiflora rose as a border and other shrubs and trees for the same purpose. Pasture and farm fields and a farm pond provide habitat for field and aquatic plants and animals. The river with its erosional and depositional features, soil profiles cut in the banks and exposures of both Ordovician and Silurian rocks contributes to the natural history value. Wildlife and forestry specialists from OSU indicate that many, fairly rare plants are found on the woods floor,

A winterized lodge and kitchen units with platforms provide living facilities.

> Contact: Manager, Camp Indian Hills 8212 W. Lauver Rd. Pleasant Hill, Ohio 45359 Phone: (513) 676-3018

PIQUA HISTORICAL AREA

Location: On SR 66, NW. of Piqua. 174 acres

An extensive enterprise is under way to develop one of the best historic complexes in the state. This centers around the Johnston Farm, the site of Fort Piqua c1795, a prehistoric Indian earthwork, home site of the Miami Indians, and Fort Pickawillany, an English fur trade post, 1749-52, yet to be purchased.

Johnston Farm has a restored house as of the 1810-15 period, a log barn of 1808, and a large brick spring house 1815. Col. John Johnston was an important Indian agent, first at Ft. Wayne, then at Piqua. A rural museum is planned also. A portion of the Miami-Erie Canal will be used as a waterway for a reconstructed canal boat equipped for passengers. Trees and other plants may be observed along the canal and the river. Picnic facilities are available here.

Fort Pickawillany - This fur trading post to be partially reconstructed, was an important political center contested by England and France. The Miami Indians traded with the French at this site as early as 1690. The town which was called Twightetwee by the Miamis was probably destroyed during the French and Indian War. An historic Indian museum is planned near the site. The towpath along the canal may serve as a hiking trail from this site to the Lockington Locks about a mile north, another part of the historical complex.

For information regarding state of development:

Contact: The Ohio Historical Society 17th & I71 Columbus, Ohio 43211 Phone: (614) 469-4663

MONROE COUNTY

MONROE LAKE WILDLIFE AREA

Location: On SR 800, 5 miles North of Woodsfield. 1,332 acres

The area lies in hilly terrain typical of unglaciated Ohio. There are broad open ridges which are under cultivation, and steep wooded slopes descending to the narrow valley floor of Baker's Fork on which 39-acre Monroe Lake is impounded. The topography varies from an elevation of 1.020 to 1,400 feet above sea level. The soils are residual and acid, underlain by the youngest bed rock in Ohio, those of Permian age. About half the land is wooded; oak and hickory dominate the drier slopes with beech, maple, elm and ash common on the lower slopes and along the streams. The remaining half is under cultivation or covered with mixed brush, grasslands and conifer plantings. Good populations of squirrels are produced; deer and ruffed grouse are in lesser numbers. Other birds and fur bearing species are present. Migrating waterfowl utilize the lake. There is a 5-1/2 mile nature trail around the lake where trees are marked; beaver dams and wildflowers may be seen.

Contact: Division of Wildlife District 4 Office 360 E. State St., Athens, Ohio. 45701 Phone: (614) 593-6933

SUNFISH CREEK FOREST

Location: On SR 7, 4 miles North of Clarington. 900 acres

This relatively new state forest is undeveloped but scenic and rich in flora and fauna. The terrain is rugged with high bluffs overlooking the Ohio River. The area is not glaciated but glaciation resulted in much abrasion and lowering of the stream beds. The hills are topped with Permian age rocks but the exposures in Sunfish Creek valley extend down into the Pennsylvanian coals, calcareous shales, and fresh water limestones. The forested hillsides are primarily beech-maple and tulip stands interspersed with pine plantations on the ridge tops. The area surrounding Sunfish Creek contains beautiful and unusual wildflowers and other plants. Spring, summer and fall are hiking months.

Contact: Manager, Sunfish State Forest Division of Forestry 360 E. State St., Athens, Ohio 45701 Phone: (614) 593-6388

MONTGOMERY COUNTY

AULLWOOD AUDUBON CENTER

Location: On Aullwood Rd., North of I-70 off SR 48 at Englewood Dam. 70 acres

Aullwood is a wildlife sanctuary owned and maintained by the National Audubon Society and dedicated to the teaching of environmental awareness. Field trips under the leadership of professional naturalists are conducted throughout the school year. Conservation workshops for teachers and youth leaders are arranged on request. The nature interpretation building features exhibits, live cold blooded animals and a sales department for nature and conservation books and materials. A special feature of the Aullwood sanctuary is a restored bit of native Ohio priarie. Here big bluestem and Indian grasses tower 10 to 12 feet into the air. Walking through these grasses is like walking through a "grass jungle" with Indians and bison being the only missing elements. The prairie puts on its best show in August and September when the grasses are grown to full height and the forbs (herbaceous plants other than grasses) are in full bloom. Picnicking is not permitted but scheduled groups present at lunch time may make prior arrangements to bring a sack

ERIC Full text Provided by ERIC

MONTGOMERY

lunch. Picnic tables, shelters, and other facilities are conveniently available for other visitors at Englewood Reserve adjacent to the Aullwood property.

Contact: Director, Aullwood Audubon Center 1000 Aullwood Road, Dayton, Ohio 45414 Phone: (513) 890-9372



AULLWOOD AUDUBON FARM

Location: On Frederick Rd., adjacent to Englewood Reserve and Aullwood Center. 120 acres

A working farm and conservation center, this area, maintained by the National Audubon Society, features typical farm livestock, farm equipment, and the interpretation of farm life in a natural setting. For first and second grades, a visit to the farm is unguided. Guided tours are scheduled for 3rd grade and up. Several lesson plans are provided from which the teacher may choose: Soil, Water, Life of a Honey Bee, Wool From Fleece to Fabric. Making Maple Syrup, Herbs and Their Uses, Past and Present and Farm Management. Special programs presented are: Farm Gardening for Youngsters 9 to 13 years of age, Candle Dipping, Sheep Shearing and The Honey Harvest. At various times during the year workshops are held for teachers and youth leaders. Indoor facilities are provided for scheduled groups.

Contact: Director, Aullwood Audubon Farm 9101 Frederick Road, Dayton, Ohio 45414 Phone: (513) 890-2963

JAMES M. COX, JR. ARBORETUM

Location: On SR 74 between West Carrolton and Miamisburg, 164 acres

The development of facilities, horticultural plantings and programs are well underway for this new arboretum. Lying in and along the enlarged flood plain and filled river valley of the Great Miami River, it has a varied terrain for habitat development. Fifty acres of woodland in the oak and sugar

maple association have hiking trails which make studies of wildflowers, birds and small mammals accessible. A new pond has been constructed around which will be centered a synoptic garden, one which embraces all kinds of woody and herbaceous plants. Thirty-five European hornbeam are already planted. An activities center and parking lot are available. No picnicking is permitted but Possum Creek Reserve, a park in the Dayton-Montgomery Park system is near.

Contact: Director, Arboretum Foundation 6733 Springboro Pike, Dayton, Ohio 45449 Phone: (513) 434-9005

DAYTON-MONTGOMERY COUNTY PARK DISTRICT

Formed in 1963 to acquire and develop open space for the residents of Montgomery County, the district is now managing seven reserves with an acreage of 4,760 acres. Four of these are leased lands at flood control dams constructed by the Miami Conservancy District. The "Green Mansions" are open to all visitors without charge. Facilities provide year-round enjoyment for family groups, youth organizations and senior citizens. In addition, the varied natural habitats provide opportunities for students, conservationists, bird, flower, tree, and rock enthusiasts to observe the beauty and research the wonders of natural phenomena. Widely scattered, each has unique features which are described separately.

Contact: Dayton-Montgomery County Park District 1375 East Siebenthaler Avenue Dayton, Ohio 45414 Phone: (513) 278-8231

Dry Lick Run Reserve

Location: On Shull Rd., North of I-70 off SR 201. 400 acres

This park is mostly open meadows, shrubland in natural succession on abandoned farmland. One section also includes second growth woodland. The terrain is flat to gently rolling, A 1-1/2 acre pond in the woodland makes an ideal aquatic study area. Plant life is typical except for an abundance of black haw (Viburnum prunifolium). Carriage Hill Farm on this site has the Arnold Homestead available for meetings, a barn with farm animals, trails, creek, and a day camp area. A trail map is available.

Englewood Reserve

Location: On SR 440 and 48, North or Dayton. 1,000 acres

The Stillwater River, its filled glacial valley and flood-plain, the Niagara Escarpment with waterfalls and upland, the marsh areas and impounded waters are all physical features contributing to the wide variety of unusual blota found here. The large marsh attracts concentrations of migrating waterfowl and shorebirds. This area includes the Blincoe Wildfowl Sanctuary. A managed Scotch pine plantation reproduces naturally and harbors saw-whet and long eared owls. The Brassfield limestone, the "firestone" of Silurian age, and Ordovician limestones and shales are the underlying bedrock, the latter very rich in fossils. A trail map is available. Aullwood Audubon Center and Farm are adjacent.



Germantown Reserve

Location: Off SR 725, 1 mile West of Germantown. 700 acres

This site features a climax beech-maple forest which approaches mixed mesophytic in composition and is unusual in quality. It lies on highly dissected glacial deposits of sand and gravel. The bottomland along Twin Creek is dominated by sycamores, silver maples and cottonwoods. Flora is outstanding in spring, summer, and fall. Diverse fungi are present in season. The lake formed by Germantown dam as well as the stream provide water habitats. Fossils are present in the exposed Ordovician limestones and shales. Camping including day camping, interpretive walks and self-guiding trails are program possibilities.

Possum Creek Reserve

Location: On SR 4, SW, of Dayton. 460 acres

The gently rolling terrain of former farmland, several small ponds, and streams on glacial till provide the physical environment of this site. Some small woodland areas are forested with beech, oak, tulip and hickory. Seral shrublands and meadows may be studied. It is an excellent birding property. Possum Creek Farm will be restored to the 1880 period and used as a rural life center. Sycamore Lodge, used for training, conferences, and meetings, will accommodate 300 people.

Taylorsville Reserve

Location: On SR 440 East of Vandalia. 1,200 acres

Situated on the Miami River, which lies below the escarpment of Niagara dolomite forming waterfalls, flood plain and a filled valley of glavial outwash, this is an excellent area for ecologic and geologic studies. Ordovician strata, the Richmond formation, and the Brassfield limestone are exposed below the resistant dolomites.

Second growth to mature woodlands with oak, sugar maple, hickory, and beech are found on the upland. The seasonal display of wildflowers is outstanding; birds and animals including deer are observed. A pine plantation provides cover for unusual bird life. In addition, there is the Miami Conservancy flood control dam and a trail which follows along a tow path of the Miami-Erie Canal for about 1-1/2 miles. Classes may join public groups in interpretive walks or use the marked trail system leading to points of interest.

E.V. JOTTER LAND LABORATORY

Location: Highvie v School on McArthur Avenue. 25 acres

Property back of the school was scheduled for a fill-in dump ten years ago. Now through the efforts of school administrators, teachers and interested citizens, it is a haven and a rich wildlife study area. The very large beech and sycamores were retained; hawthorn, buckeye, walnut, gum and apple trees are in association Twenty-two varieties of wildflowers and many birds find shelter in the original forest and undergrowth. The mile long property is dissected by a small, consistent and polluted stream with a small back water or "bay" area. Abundant fossils of Ordovician age limestones and shales known as the Richmond are found in and along the stream. Birds include cardinal, jay, mocking bird, Carolina wren, several species of woodpecker and song sparrow. A naturalist is not available presently but visitors may seek guide service from the school personnel and Mr. Jotter.

Contact: Principal, Highview School 2101 McArthur Avenue, Dayton, Ohio 45418 Phone: (513) 263-2678

NORTHMONT SCHOOL LAND LABORATORY

Location: In the Junior and Senior High complex at Clayton. . 10 to 15 acres

Basically a wooded area of the oak-sugar maple forest association on limestone soil, the property also contains specimens of hackberry, blue ash, buckeye, redbud, hickory and walnut, some of these definite soil indicators. Adjacent to the Stillwater River valley, the site has two small streams dissecting the terrain, one a wet weather stream only. Hiking trails have been developed. For visitation arrangements and further information contact:

Director, Northmont School Land Lab Northmont Senior High School, Clayton, Ohio 45315 Phone: (513) 836-5181

WASHINGTON TOWNSHIP PARK DISTRICT

Through the efforts of enthusiastic criziens of Centerville and Washington Township, a park district was established and land procured for green islands, and open space. A nature park, a community park, and several neighborhood parks are available with more sites potentially a part of the system. For trail guides, information and reservations, contact:

Park Director Washington Twp. Park District 428 Limberlost Trail Dayton, Ohio 45429

Concept Park

Location: SE. of Centerville off SR 48. 6 acres

An open meadow with a grove of beech and locust trees and landscaping provide limited nature study. The area is used primarily for active recreation.

Donnybrook Park

Location: Just off Dayton-Lebanon Pike, North of Centerville. 4-1/2 acres

This park is slightly rolling terrain having access to a branch of Holes Creek. A one-acre marsh in a low area has cattail, reed, and other marsh vegetation and animal life. The area is partly wooded.



MONTGOMERY-MORGAN

Grant Park

Location: 401 Normany Ridge Rd., NW, of Centerville. 60 acres

Recognized as a "Nature Park" the property borders the main course and one branch of Holes Creek, a tributary of the Great Miami River, for a distance of 1-1/2 miles. Two pools with cascading water over rock outcroppings between them provide ample habitat for aquatic life. The park is heavily wooded in some places with the oak-hickory forest type and the neutral soil trees typically found in the area. Wildflowers, birds and mammals are fairly abundant. Fields in natural succession provide the third major habitat for study. Fossils of the Richmond formation of the late Ordovician period may be collected along the stream.

Grant Life Science Center, is operated by the Board of Education, and runs a year-round nature and science program using Grant Park as an outdoor laboratory. The 15 acre Normany school site adjoins the eastern edge of the park. Teachers of grades kindergarden to ninth grade, bring classes for half-day or daylong sessions. Sixth grade classes may attend a four-day camping session during the school year. A similar summer program called "Project Trailblazer" has two-week periods. School facilities, three dormitories, three laboratories and an outdoor amphitheatre are available for the program.

Contact: Director, Grant Life Science Center 401 No mandy Ridge Road Dayton, Ohio 45459

Old Lane Park

Location: NW. of Centerville. 4-1/2 acres

Rolling, open meadow with the east boundary a heavily wooded old farm lane, the area has possibilities for study.

Yankee Park

Location: West of Centerville limits. 18 acres

This park has 14 acres of gently rolling open meadow and four acres of dense woods. The wooded section has trails and is excellent for nature walks.

MORGAN COUNTY

THE BUCKEYE TRAIL

46 miles

The Buckeye Trail enters the county in the northwest part near Burr Oak Lake. From here it follows along old or little traveled roads through valleys and over hills of farms and woodlands. It leaves a high ridge and d.ops down to the Muskingum River where it crosses at Stockpost, then climbs again to high rolling hilltops. The trail becomes increasingly interesting when it enters the Ohio Power Company Recreation Area a little west and south of Reinersville. This is an early strip mine area showing high walls composed of late Pennsylvanian period coals, sandstones, shales, and limestones. The winding lakes created by the mining operation coincide with the trail for a number of miles. In the marshes, ravines and natural woodland many kinds of veg-

etation and animal life including birds may be seen. Of particular interest are several beaver colonies. The reclaimed stripped area has attained considerable growth in places which provides wildlife food and protection. Excellent camp sites and facilities are available in the Ohio Power Company Recreation Area in Bristol Twp. where the trail crosses SR 76, another five miles northeastward, and at a picnic site at the Noble County line, Permits are required for use of sites. They may be obtained free by writing to the Ohio Power Company, McConnelsville, Ohio, 43756. Ask for their free Recreation Area map.

Contact: Buckeye Trail Association, 913 Ohio Dept.Bldg, Columbus, Ohio..43215 Phone: (614) 469-3984

BURR OAK STATE PARK

Located along State Routes 13 and 78. 2,899 acres

Nestled among the silent hills of southeastern Ohio is a 664 acre lake providing a beautiful setting for Burr Oak State Park. The extensive acreage is located primarily in Morgan and Athens counties but there is a substantial amount of land in Perry County as well. The hilly terrain is the result of erosion in the lower Pennsylvanian age strata. The hills are covered with the typical oak-hickory vegetation and associated shrubs and wildflowers in season. Not so visible, but unmistakingly present are many small wild animals. A portion of the Buckeye Trail, with its blue blazes, winds through the area as a part of the park's hiking trails. A beautiful lodge and cabins are available for overnight housing.

Contact: Manager, Burr Oak State Park Rt. 1, Box 29B Glouster, Ohio 45732 Phone: (614) 767-3350

CAMP DOUDA DALE

Located South of Malta. 500 acres

These beautiful acres most of which are unspoiled woodland lie in reserve for Girl Scout camping. As a field trip for observing the relatively undisturbed ecology of an eastern Ohio forest, it is practically unsurpassed. The property lies between a strip mine area on the west and the Muskingum River on the east. The largest ravine shows rugged rock exposures of the Pennsylvanian sandstones, shales and linestones. A hike up the stream necessitates crossing and recrossing it many times. Large oaks and other hardwoods, shrubs and small trees, a profusion of wildflowers, many birds and other animal life are available for wide eyes to see. Small steep ravines of tributary streams may be explored. Though not far from a center of human activity the environment creates a sense of peace and remoteness. A farmhouse on the hill provides housing for small groups.

Contact: Camp Registrar, Seal of Ohio Girl Scout Council 170 N. High St. Columbus, Ohio 43215

Phone: (614) 221-3291



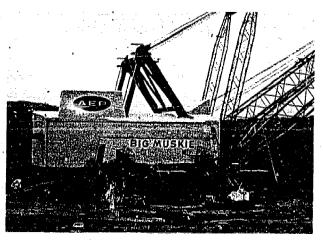
MUSKINGUM RIVER PARKWAY STATE PARK

(See also Muskingum & Washington Counties)

Located along the Muskingum River.

At scenic spots along the river where dams and locks are located, small parks have been developed. They provide an excellent opportunity to study river bank vegetation and navigation procedures. In Morgan County these locks and dams are located at Stockport on State Route 367, at McConnelsville on State Route 60, at Luke Chute on State Route 266 and at Rokeby Lock on State Route 60. Locks are open only during the normal boating season.

Contact: Manager, Muskingum River Parkway State Park Box 2806, Zanesville, Ohio 43701 Phone: (614) 452-3820



OHIO POWER RECREATION AREA (CUMBERLAND MINE AREA)

Located in the NE. part of the county. 100,000 acres total

The Morgan County section of this extensive strip mine area has ten campsites, any one of which would make an interesting spot to study ecological developments. Remnants of the original vegetation, the topography, rock structure, and normal stream dissection provide a background of man's activity. Early settlers cleared the rolling hills of much of the beech and mixed oak forest and used the land for farming. A few of these farms remain. The rich coal seams have been mined for many years for the purpose of supplying coal to produce electricity. In 1944, the Ohio Power Company began a forestry program to replace the coal resource with a renewable resource, namely wood. The Morgan County area shows the results of the program for much of the county is returning to a woodland environment. High rock walls, narrow winding lakes, ravines with native hardwood species, marshes, and streams provide habitat for birds and other animals, including extensive beaver activity in the area near the Noble County line. Of interest at the Spruce Valley campsite, in addition to the natural history, is a view of the unique Muskingum Electric Railroad. Permits are required for anyone leaving the state highway for field trips, camping or picnicking. Maps and other information are provided.

> Contact: The Ohio Power Co. P.O. Box 328, McConnelsville, Ohio 43756 Or: Division of Wildlife District 4 Office 360 E. State St., Athens, Ohio 45701

WOLF CREEK WILDLIFE AREA

Location: On SR 78, 7 miles SW, of McConnelsville. 3,600 acres

Wolf Creek courses through this large, unspoiled area revealing limestone outcrops and many species of wildlife in and along the stream. In their beautiful natural setting beaver, muskrat, raccoon, wood duck, woodcock, soft-shelled snapping and painted turtles, and large bull frogs may be seen. Wildlife management practices are well developed. State Route #78 from the Wolf Creek area towards Burr Oak Lake State Park is very scenic, known as the "Rim of the World". Facilities of the wildlife area are limited to parking, thus making proximity to the state park a decided advantage.

Contact: Manager of Wolf Creek Wildlife Area Rt. #3 Malta, Ohio 43758 Phone: (614) 962-2048

MORROW COUNTY

CAMP BROAD ACRES

Location: On Kunzie Rd., 1-1/2 miles NE. of Chesterville. 600 acres

The three major habitats, woodland, field, and water, are amply provided at this site. The camp lies on the glaciated Allegheny Plateau which has been dissected to form rolling topography. The extensive wooded parts are beech-maple forest type with a profusion of dogwood at the forest edge. Street is have eroded through the glacial till cover to the Mississippian sandstones and shale which outcrop in the narrow ravines. Two lakes with bordering marshlands and higher swamp areas give an abundance of study possibilities. The woodland areas shelter many wildflowers, birds and small animals. Trails have been developed giving access to varied habitats which in turn create a sense of quietness and appreciation of the natural world. A small winterized lodge with food service facilities is available. Reservations must be made three months in advance.

Contact: Manager, Camp Broad Acres Broad Street Presoyterian Church 760 East Broad Street, Columbus, Ohio 43215 Phone: (614) 221-6552

DOGWOOD VALLEY CAMP

Location: On SR 61, 2 miles North of Mt. Gilead, 1/2 mile East on Twp. Rd. 99. 85 acres

Thousands of dogwood trees characterize this private recreation area, with many other trees of the beech-maple forest type in association. A 6 acre spring fed lake and the east branch of Whetstone Creek provide water for sport and study. Hiking trails, boats and water bikes are available.

Contact: Dr. & Mrs. A.F. Southard Rt. 1, Mt. Gilead, Ohio 43338 Phone: (419) 946-5230

LUTHERAN MEMORIAL BIBLE CAMP

Location: On SR 61. 6-1/2 miles South of Mt. Gilead. 114 acres

Virgin timber, a sugar bush and acres of red and white pines are among the interesting features of this camp. Huge tulip trees in a beech-maple climax forest have an under-



MORROW-MUSKINGUM

story of herbaceous plants, among them many species of wildflowers. The land is glaciated, Wisconsin end moraine covering Berea sandstone and Bedford shale of Mississippian age. A small stream has cut through the relatively thin glacial till giving erosional and depositional features for study. The stream is a tributary of Alum Creek near its headwaters. The maple sugar operation takes place each year in early spring yielding maple syrup, fun and an educational experience.

The campus contains a large winterized lodge and sleeping cabins.

Contact: Manager, Lutheran Memorial Bible Camp Fulton, Ohio 43321 Phone: (419) 864-2766

MT. GILEAD STATE PARK

Location: On SR 95 East of Mt. Gilead. 172 acres

A double dam on Whetstone Creek makes 30 acres of lake and a beautiful setting for this small park. The area lies just at the edge of the Allegheny Plateau, the Berea sandstone of Mississippian age exposed above the Bedford and Ohio shales. The region is glaciated with a variable cover of the Wisconsin drift. The hillsides above the lake are covered with a beech-maple forest, a large red pine plantation, a spruce planting, orchard, cherry and dogwood trees adding diversity. Equisetum and skunk cabbage are in the swampy areas.

Contact: Manager, Mt. Gilead State Park Rt. 3, Mt. Gilead, Ohio 43338 Phone: (419) 946-1961

MUSKINGUM COUNTY

BAUGHMAN PARK

Location: On SR 586 just North of SR 16. 65 acres

This unique park of 65 acres was developed in the early 1900's by its patriotic owner as a memorial to Ohio's statesmen. The massive sandstone formation exposed in the upper levels of the hillsides was quarried in the early days of Ohio history and used extensively for bridges, railroad abutments and buildings. When it was no longer economically feasible to use the rock, the abandoned quarries and surrounding hilltop were forested with conifers and returned to a somewhat natural environment. Huge blocks of the native sandstone were carved into statues of some of Ohio's great men including McKinley, Grant, Sherman, Harding as well as one of Washington and the "Doughboy". The forest area includes many native Ohio trees; fossils may be found in the bedrock below the massive sandstone format n; wildflowers and birds are abundant.

Contact: Mr. & Mrs. Ray Murray Rt. 3 Frazeysburg, Ohio 43822 Phone: (614) 828-4971

BLUE ROCK STATE PARK AND FOREST

Location: (Park) 5 miles South of Duncan Falls on SR 60; East on Co. Rd. 45.

4,910 acres

Nearly 5000 acres of hill country on the east side of the Muskingum River was obtained by the state in 1936 under the Federal Land Utilization program. The hills are covered

with oak-hickory, beech-maple hardwood forest types. In addition to these, the park area contains numerous pine plantations, with trees of considerable size giving something of a tucked-away forest-primeval aspect to the area. Cutler Lake of approximately 15 acres was made by damming a small stream. The hills show mature stream dissection in the sandstones, shales and limestones of the Pennsylvanian period rock strata. Outcrops may be studied along the streams near the river level. One formation actually appears to be blue, especially when it is wet from springs above or rainfall. This may be observed particularly well along SR 60. Numerous wildflowers typical of southern Ohio woodlands are found in the hardwood forests. Its wilderness environment provides shelter for animals, seen and unseen. The rest contains a lookout tower.

Contact: Manager. Blue Rock State Park Rt. 1, Blue Rock, Ohio 43720 Phone: (614) 674-4794

DILLON STATE PARK AND RESERVOIR AREA

Location: On SR 146 North of Zanesville. 6.675 acres

This reservoir was created by damming the Licking River a relatively short distance above its confluence with the Muskingum River. This was for a dual purpose: flood control and recreation. The park area lies in the part of the watershed beyond the glacial boundary. The reservoir, however extends into Licking County to the Black Hand Gorge. (See description under that title and county.) The unglaciated hills and valleys are scenic, much of the area in old fields with some substantial amounts of woodland in the ravines. Swamp land is abundant along the lake shore in places. A nature program is conducted during the months from April to October. Park facilities are found on both sides of the winding lake.

Contact: Manager, Dillon State Park Rt. 1, Nashport, Ohio 43830 Phone: (614) 453-0442

DONAHOE TREE FARM

Location: On SR 209, 8 miles West of Cambridge.
155 acres

For a study of timber planting and management this is a valuable site. Four plantations of white and red pine have 10,000 trees in each at various stages of growth ranging from 6 to 10 years. A stand of hardwood trees of harvestable size occupies 39 acres. Another plot of 25 acres has a crop of young hardwoods of various species. The farmer raises horses of pedigree stock, Arabian and American saddle. The farm house is historically interesting in that it was built 137 years ago and uses spring water exclusively. The farm is situated on unglaciated rolling hills underlain by Pennsylvanian age sandstones, shales, coal and limestone.

Contact: Howard A. Donahoe Rt. 2, New Concord, Ohio Phone: (614) 826-4114



MUSKINGUM RIVER PARKWAY STATE PARK

(See also Morgan & Washington Counties)

Located along the Muskingum River, 116 acres

Small park areas have been established at the dams and locks along the river to provide easy access for observation. In Muskingum County these sites are at Philo and Zanesville on State Route 60 and at Ellis on SR 60 to Co. Rd. 49. These are excellent for observing typical river bank vegetation, flood plain, terraces and valley profiles as well as navigation procedures. Locks are open only during normal boating season.

Contact: Manager, Muskingum River Parkway State Park P.O. Box 2806, Zanesville, Ohio 43701 Phone: (614) 452-3820

OHIO POWER RECREATION AREA (CUMBERLAND MINE AREA)

(Also see Morgan County)

Location: In Meigs Twp. along SR 284 and 340. 100,000 across total

A drive through the active strip mining and reclamation areas of this county provides an understanding of the processes and problems, a picture of the beautiful hill country prior to stripping, land which has had recent reclamation activity, and older, more effectively treated areas. The camp and picnic sites where access roads are available are found in Morgan County.

Contact: The Ohio Power Co. P.O. Box 328, McConnelsville, Ohio 43756 Or Division of Wildlife District 4 Office 360 E. State St., Athens, Ohio 45701

POWELSON WILDLIFE AREA

Location: On SR 60, 7 miles North of Zanesville. 2,696 acres

This area offers the student of natural history an opportunity to evaluate reclamation efforts on strip-mine land, to observe it 25 years after mining. One fifth of the land has been denuded, then reforested with black locust and pine, reaching pole size at the present stage. Other parts are composed of grasslands, old fields and upland woods in approximately equal amounts. The hilly, unglaciated terrain underlain by Pennsylvanian age rock strata has thin, acid soils. This is reflected in the vegetation. There is a wide variety of furbearers, quail and grouse to be seen.

Contact: Division of Wildlife District 4 Office 360 E. State St., Athens, Ohio 45701 Phone: (614) 593-6933

WILDWOOD

Location: On Twp. Rd. 202, 1 mile West of New Concord. 200 acres

A private campground has been developed on rolling hills underlain by the rock formations of Middle Pennsylvanian age. The property lies almost in the trough of a syncline. This is a downward fold in the layers of rock due to stresses.

On the west arm the Ames limestone, coals and red shale are exposed; on the east, the Cambridge limestone and a different coal seam may be observed in road cuts or ravines. Fossil hunting in the area is rewarding. The soils are residual and generally acid. The forest type, mixed oak with many species in association, and the shrubs and wildflowers reflect the soil and climatic conditions. Seventy-five per cent of the area is forested and five miles of hiking trails give access to the woodland and to four high overlooks. Birds are abundant and mammals including deer, may be seen. Two lakes provide water habitat, boating, fishing and swimming. A year-round attendant lives on the premises. Charge may be negotiated on basis of size, age and supervision of group.

Contact: Owner, Harry Mason Rt. 1. New Concord, Ohio 43762 Phone: (614) 826-4325

ZANESVILLE STATE NURSERY

Location: On SR 666, 6 miles North of Zanesville. 206 acres

The nursery is operated to obtain seeds and seedlings of a variety of species of pine. These are then distributed to various state properties for reforestation purposes. The pines are carefully managed and there are different age groups to observe. The property lies along the rich flood plain of the Muskingum River. Some hardwoods, of the mixed oak forest group, are present.

For further information contact:

Zanesville State Nursery Gilbert Station, Rt. 5 Zanesville, Ohio 43701 Phone: (614) 453-9472

ZANE TRACE SCHOOL FOREST

Location: On North Blue Ave. 48 acres

A school forest has been developed on this site with teaching stations and a forestry trail guide prepared to help teachers interpret the ecology to students at all levels of understanding. The trail has 23 stations. It begins on a knoll of hardwoods and proceeds through plantations of white pine, then upstream on Joe's Run. Meandering streams, swamplands, contour strips and a limited orchard area add to the diversity of habitat. Further benefits to wildlife are plantings of multiflora rose. Evidence of an Indian chipping area, den trees, bee areas, fire lanes and experimental plantings may be observed also. An outdoor classroom seating 25 persons can be used. September through November and April through June are months recommended for field trips.

Contact: Zanesville High School Zanesville, Ohio 43701

NOBLE COUNTY

THE BUCKEYE TRAIL

Location: From Roadside Park on SR 76 at Morgan County line, to Roadside Park near dam of Seneca Lake. 29 miles

In Noble County the Buckeye Trail enters near Brown Knob which has an elevation of 1170 feet. It leaves the active strip mine area at that point and travels through farm and



woodland. Many kinds of plants and animals reflect changing land and water patterns of the area. There are excellent panoramic views of the countryside from the knobs as well as opportunities to observe the coal, limestone, shale, and sandstone in the cuts and rock walls. The Trail leads into Wolf Run State Park where camping and other facilities are available. Oak, hickory, aspen, ash, maples, and buckeye trees are found in unspoiled ravines going down to the lake. Wildflowers are plentiful. The farming acreage is part of the Eastern Ohio Resource Development Center which is a relatively new agriculture research program. A description of this research area is included under the above listing. Oil and gas wells are evident along much of the trail; the oldest oil well in the U.S. is off the Trail near Caldwell at the junction of State Routes 78 and 564. Beautiful Seneca Lake, largest in the Muskingum Watershed Conservancy District, two miles of woodland trail, a fire tower, and a roadside park climax the Trail experience as it enters Guernsey County. Maps, at a cost of 25¢, and further information are available from:

> The Buckeye Trail Association 913 Ohio Depts. Bldg. Columbus, Ohio 43215 Phone: (614) 469-3984

EASTERN OHIO RESOURCE DEVELOPMENT CENTER

Location: Unit I-East of I-77 Interchange at Belle Valley
Unit II - 7 miles SE. of Caldwell.
2,000 acres

Centrally located in the Appalachian Plateau area of Ohio, both areas are on rolling hills which are thinly covered with light soils low in fertility. The Center has been established in Noble County, which, like others in eastern Ohio, is a problem area with low returns on an agricultural investment. The first research site, Unit I, purchased in 1965, is on the shore of Noble County Lake. Unit II is situated south of Unit I and has 1,325 acres in a heavily strip-mined land. Here research is directed toward increasing fertility and finding plants that will grow on eroding wastelands. Research on both properties is designed to find the best combinations of crops and livestock for profitable agricultural enterprises. Fruit production in grapes, peaches, apples, and elderberries is conducted on an experimental basis. Contour and no-tillage system of planting, to keep down erosion, may be observed. This is an excellent area to study ecology involving the effects of rock, soil, climate, natural vegetation, man's use of the land for farming, exploiting coal and now reclamation.

> Contact: Manager EORDC Rt. #6, Caldwell, Ohio 43724 Phone: (614) 732-2358

OHIO POWER RECREATION AREA (CUMBERLAND MINE AREA)

Location: In Brookfield Twp., NW. part of county along SR 76,340 and 215.
100,000 acres total

This extensive section of strip-mine country in Noble County contains two very intensively mined and reclaimed areas with many lakes, ponds and plantations of woodland, some private farms, a long stretch of the Muskingum Electric Railroad, two restricted sites where active mining is being done and two parksites. State Route 6 south leads to Brook-

field parksite which contains an information center, picnic facilities, pine plantation, small-tree forest with a few large oaks, two planted bald cypress trees, rock exposures nearby and a spur of the electric railraod which has on permanent display an electric locomotive and cars. A trip on down State Route 76 shows the reclaimed land in several stages of development, the best of which appears to be quite comparable to the untouched farmlands. Another parksite. Hunter's Cut, is on State Route 340 in a heavily wooded area, Permits are required and maps are available.

Contact: Ohio Power Co. P.O. Box 328 McConnelsville, Ohio 43756 Phone: (614) 962-4525 Or Division of Wildlife District #4 Office 360 E. State Street Athens, Ohio 45701

SENECA LAKE

Located on SR 574, 147, and 670 in the NC. part of county. Land—3,610 acres Water—3,550 acres

The major part of this beautiful lake, built by impounding he water of the Seneca Fork of Wills Creek, lies in Noble Jounty. The largest of the Muskingum Watershed Conserancy District reservoirs covering 3,550 acres, it winds its way around rolling hills with miles of shoreline to provide study areas for aquatic plants and animals. In addition, mixed oak hardwood forest remnants with shrubby ravines contain many kinds of trees and herbaceous plants, wildflowers, birds, and Permian rocks. Beatty Knob with an elevation of 1,220 feet and a fire tower are at the south end of the lake. The Buckeye Trail may be followed for two miles along the western side through delightful woodland. A roadside park, providing necessary conveniences, is at the dam site.

Contact: Manager, Senecaville Reservoir
Box 146
Senecaville, Ohio 43780
Phone: (614) 827-3325

WOLF RUN STATE PARK

Location: SE. of I-77 near Belle Valley. 1,183 acres

Noble County Lake, a shining jewel nestled among the rounded hills, is surrounded by abandoned farm fields, an oak-hickory forest with many other trees and shrubs, and land being used by the Eastern Ohio Resource Development Center. The park area is on the hilltops and gives a panoramic view of the countryside for miles around. A long ravine, wooded with mixed hardwoods, predominantly oak and hickory, leads down to the lake. The road to the boat ramp has a cut containing a coal bed and other rock formations typical of the area. An interpretive naturalist is available during the summer.

Contact: Park Manager, Wolf Run State Park Rt. 6 Caldwell, Ohio 43724



OTTAWA COUNTY

CAMP PLYMOUTH SHORE

Location: On SR 135 at Englebeck Rd. 5 acres

This is a private girls' camp specializing in water related activities and riding. The lake shore offers a good study area for aquatic vegetation, wind and wave action, fossiliferous limestone rocks and glacial deposits. The woodland contains elm: cottonwood, silver poplar, horse chestnuts, spruce, cedars, and wildflowers in spring. Inquiries about school camping or day outings should be directed to:

Le Roy Higby 8010 E. Bay Shore, Marblehead, Ohio 43440 Phone: (419) 734-3524

CAMP SABROSKE

Location: Along Touissant River and Parker Creek on Twp. Rd. 62. 110 acres

This church retreat across the river from the Touissant Wildlife area contains uncommon trees such as English walnut and almond and others typical of the elm-ash-swamp forest. Many varieties of birds, small mammals, wildflowers and marsh flora may be studied. A winterized lodge, boats and canoes may be used in the spring and fall except during duck season. There is no charge for field trips only.

Contact: Charles W. Smith Rt. #3, Oak Harbor, Ohio 43449 Phone: (419) 898-6741

CAMP YUKITA

Location: On NW. Catawba Rd., West on Lake Erie.
35 acres

With its lake shore, lagoon, woodland, and field, this camp has much to offer for outdoor education. The 3 acre wooded area is primarily in trees typical of moist habitat such as willow, cottonwood, walnut, and others. The underlying rocks are the thin-bedded dolomites of the Tymochtee member of the Monroe group, late Silurian in age. A lodge and cabins provide living quarters, the lodge partially winterized.

Contact: Camp Director, Camp Yukita 409 South Arch Street Fremont, Ohio 43420 Phone: (419) 332-8641

CATA VBA STATE PARK

Location: On SR 53 and 357. 8 acres

A small site on the lake at the tip of the peninsula serves primarily as a boat launch facility and picnicking site. There is no significant flora due to limited acreage and extensive use.

> Contact: Park Manager Lake Erie Islands 4049 E. Moores Dock Rd. Port Clinton, Ohio Phone: (419) 797-4530

COOK'S WOODS

Location: Bay Shore Rd. along Sandusky Bay. 30 acres

This small plot contains a great variety of trees, shrubs and herbs typical of swamp forest. It is a part of a larger property some of which has been quarried for limestone. This is the highly fossiliferous Columbus limestone, the bed rock of the area. Birds and small mammals may be observed also.

Contact: Manager, Standard Slag Co. 525 Limestone Dr., Marblehead, Ohio 43440 Phone: (419) 798-2711



CRANE CREEK WILDLIFE EXPERIMENT STATION OR MAGEE MARSH

Location: On SR 19 and 2, 10 miles North of Oak-Harbor. 2,600 acres

The Lake Erie marshes have been famous for 75 years as one of the best waterfowl hunting areas in the U.S. This applies to hunting-to-see as well as hunting-to-kill. Magee Marsh, purchased in 1951, has two functions: it serves as headquarters for wildlife waterfowl research and management projects and it is a controlled, hunting-by-permit waterfowling area. Canada geese, mallards, blue wing teal, wood duck and smaller numbers of other waterfowl nest here. But the number and large variety of migrating waterfowl is amazing. State biologists have reported concentrations exceeding 100,000 birds in this general area for brief periods. Flocks of migrating whistling swans, peak at 5,000 birds, appear in March. Warbler concentrations during migration are reported to be among the best in the state. Bitterns, herons and a wide variety of shore birds are common to the area. A bird nature trail as well as dikes for hiking, reached from the Turtle Creek Fishing Access where parking is available, facilitate seeing the wildlife. A full time naturalist is available and maps may be requested. A new facility known as the Sportsmen Migratory Bird Center has been completed recently.



The Marsh is adjacent to the Ottawa National Wildlife Refuge. Crane Creek State Park, a narrow strip of land between Magee Marsh and Lake Eric proper provides facilities.

> Contact: Supervisor, Crane Creek Wildlife Experiment Station Rt. 3, Oak Harbor, Ohio 43449 Phone: (419) 897-2523

CRYSTAL CAVE

Location: South Bass Island.

Known to geologists as the "Immense Geode" this cave has a mass of the dazzling mineral celestite (strontium sulphate) completely covering the interior. The sidewalls are of solid material and the ceilings are arch shaped and hung with crystals. The crystals are prismatic; the angles of each of the crystal faces are exactly alike on each one.

Strontium sulphate is a heavy mineral, often white with a bluish tint and is usually associated with limestone as it is in this cavity. The deposit is reported to be the biggest in the U.S., and contains the largest crystals, some being 18 inches in length, School groups may visit from May 20th through Labor Day.

Contact: Louis V. Heineman Put-in-Bay, Ohio 43456 Phone: (419) 285-2811

EAST HARBOR STATE PARK

Location: On SR 163 at 240, East of Port Clinton. 1,613 acres

A long sand beach extending for 2-1/2 miles is considered one of the finest along Lake Erie. Excellent aquatic vegetation can be found on the shore and bays. Shore birds and waterfowl may be studied during migration. There is typical emergent natural vegetation but most of the trees occur in open-parklike areas. A nature interpretation program is conducted during the summer.

Contact: Manager, East Harbor State Park Rt. 2, Box 40, Port Clinton, Ohio 43452 Phone: (419) 732-3719

LAKESIDE

Location: On SR 163 on Marblehead Peninsula.

The Methodist church campground contains a large winterized lodge which sleeps up to 100 persons. Meals may be prepared in it. Although the town of Lakeside is heavily populated, especially during the summer months, this facility might be advantageous as a home base for hikes and field trips into adjacent or nearby areas. The peninsula is a rock ridge over which the glaciers passed but left only a thin coat of drift. It is underlain by the Columbus limestone which is highly fossiliferous. It has been quarried extensively and the lands are now returning to a natural state. Waterfowl and shorebirds are found on the lake; songbirds in the woods and along the shore. A delightful little lighthouse may be visited. For further information contact:

Manager, The Lakeside Association Lakeside, Ohio 43440

LITTLE PORTAGE WILDLIFE AREA

Location: On SR 53, 5 miles West of Port Clinton, 357 acres

The area is a combination of river marsh and a low lying agricultural ground, a portion of which has been diked for water level control. The area is bounded by the Portage and the Little Portage Rivers. It lies on the flat, glaciated Lake Plain; on the silts and clays which were deposited in an earlier Lake Erie. Waterfowl and shorebirds of many varieties can be found during spring and fall migrations. Wood ducks, mallards and bluewing teal nest here. The fish species include carp, channel catfish, bullheads and crappies. A boat launching ramp and other facilities are present.

Contact: Division of Wildlife District 2 Office 952 Lima Ave. Findlay, Ohio 45840 Phone: (419) 422-6757

OTTAWA NATIONAL WILDLIFE REFUGE

Location: Borders Lake Erie off SR 2. midway between Toledo and Port Clinton. 4.800 acres

This is the only federal wildlife refuge in the State of Ohio. It consists of diked marshes and farmland with a few woodlots. Crane Creek flows through the refuge. It is one of the few Bald Eagle nesting sites left on the Great Lakes. Over 250 species of birds have been found on the refuge along with a variety of mammals, reptiles and insects. It is managed for waterfowl migrations and nesting. The marsh vegetation is predominately cattail with a variety of sedges and many species of grasses. Colorful aquatic plants bloom through the summer months. The beautiful white pond lilies and yellow spatterdocks are interspersed with the blue of the pickerel weeds. Later the marsh mallow turn the marshes pink. There are many miles of dikes which are excellent for hiking and interpretive tours will be conducted by members of the Toledo Naturalists' Association on request. Crane Creek State Park adjoins the refuge and may be used for rest periods on all day field trips.

> Contact: Manager, Ottawa National Wildlife Refuge R.R. #3, Oak Harbor, Ohio 43449 Phone: (419) 897-2521 Or: Sanctuary Chairman, Toledo Naturalists' Association 3831 Homewood Ave., Toledo, Ohio 43612 Phone: (419) 475-7012

PERRY'S CAVE

Location: At Put-in-Bay on South Bass Island.

10 acres

The discovery of this cave is credited to Commogora Performent of the battle of Lake Erie, while his squadron to be anchor in the bay a few days prior to the battle. Tradition claims that Perry stored ammunition and cannon in the cave and kept British prisoners there.

The cave is located 52 feet below the surface; it is 208 feet long and 165 feet wide. It is heavily encrusted with precipitated calcium carbonate which was deposited by the evaporation of dissolved limestone water as it dripped from the ceiling. Of wide fame is the wishing well, a pool within the cave that rises and falls with the level of Lake Erie.



OTTAWA-PAULDING-PERRY-PICKAWAY PAULDING COUNTY

PAULDING PONDS

Location: Off Co, Rd, 107 near fairgrounds. 51 acres

An impounded portion of Flat Rock Creek, a tributary of the Auglaize River, and three ponds justify the name of this area. It lies on the glaciated flat Lake Plain typical of western Ohio with underlying rock of the Tymochtee member of the Monroe dolomite group. The soils are dominantly clay and they are poorly drained. The ponds contain various types of aquatic vegetation and associated aquatic organisms. A diverse fish population, seasonally migrating waterfowl, pheasants, quail and small mammals may be observed.

Contact: Division of Wildlife District 2 Office 952 Lima, Ohio 45840 Phone: (419) 422-6757

PERRY COUNTY

CLOUSE LAKE WILDLIFE AREA

Location: On SR 668, 3 miles South of Somerset. 93 acres

Dipping down a hill one comes suddenly upon this choice little lake with a picnic site conveniently by the highway. The 41 acre lake contains an excellent fish population. A limited number of waterfowl may be observed in early spring migration. The marginal land consists of pine plantations interspersed with hardwoods of beech, maple and hickory. Expansion of the area is imminent which may temporarily limit visitation.

Contact: Division of Wildlife District 4 Office 360 E. State St. Athens, Ohio 45701

Athens, Ohio 45701 Phone: (614) 593-6933

ROYMA ACRES

Location: On SR 37, 9 miles East of New Lexington, 1,000 acres

Originally a tree farm in a strip mine area. Royma Acres has developed into a large camping site. The rolling hills surround lovely lakes which are the center of many activities. Hiking trails and bridle paths lead into woodlands of planted conifers and hardwood remnant forests. Here many birds and other animals may be seen as well as wildflowers and shrubs.

Contact: Roy J. Masterson's Tree Farms Rt. 2, Crooksville, Ohio 43731

Phone: (614) 342-2816

PICKAWAY COUNTY CIRCLEVILLE CANAL

Location: 1 mile South of U.S. 22, West of Circleville. 35 acres

This site has historic interest in that it is a five mile portion of the Portsmouth-Lake Eric Canal which has been impounded at the south end. A towpath trail gives access to study various aquatic plants and animals as well as succession plants along the old canal. The waters are stocked with bass, bluegills and croppies.

Contact: Division of Wildlife
District 1 Office
1500 Dublin Road
Columbus, Ohio 43212
Phone: (614) 469-3337

Tours extend from May 30th the Labor Day.

The property above ground has a variety of trees, wildflowers, birds and small animals. Fossiliferous limestone is exposed also.

> Contact: Perry Cave, Inc. Put-in-Bay, Ohio 43456 Phone: (419) 285-3496

SOUTH BASS ISLAND STATE PARK

Location: In Lake Erie North of Marblehead Peninsula. 32 acres

This delightful state property can be reached only by ferry or plane from Lakeside or Sandusky. A field trip here is for the adventuresome teacher and classes. The park is situated on limestone cliffs with excellent exposure on a rugged shore line. The area is predominately an oak-maple woods with associated wildflowers, birds and small mammals. The remains of glacial grooves, which on Kelleys Island are deeper and longer, can be found.

This island contains also, the famous Perry's Memorial and Perry's and Crystal Caves.

Contact: Division of Parks and Recreation
Department of Natural Resources
State Office Building
Columbus, Ohio 43215

STONE LABORATORY

Location: On Gibralter Island opposite village of Put-in-Bay on South Bass Island. 10 acres

The Franz Theodore Stone Laboratory Teaching and Research Program is an extension of the Ohio State University biology curriculum. It is a two-term summer school program designed by the College of Biological Sciences to meet the needs of biology and general science teachers, and graduate and undergraduate biological science majors. Since its origin in 1896, it has provided continuous training and research opportunities.

The island is reached by air or water ferry from Catawba Point. Dormitories for men and women, and for married students without children, are provided. Reservation for enrollment in courses should be made by May 16th or earlier.

Contact: Director, Franz Theodore Stone Laboratory The Ohio State University 1735 Neil Avenue Columbus, Ohio 43210 Phone: (419) 285-2341

TOUSSAINT WILDLIFE AREA

Location: 2 miles South of SR 2. 236 acres

A combination of marsh and low lying farmland, this area is diked for water level control. Approximately 1-1/4 miles of Toussaint Creek shoreline bounds the property. Fish, migrating waterfowl and shorebirds constitute the animal life; a wide variety of marsh flora may be observed.

Contact: Division of Wildlife District 2 Office 952 Lima Avenue Findlay, Ohio 45840 Phone: (419) 422-6757



DEER CREEK STATE PARK

Location: South of Mt. Sterling on SR 207. 9,277 acres

Recently acquired from the Corps of Engineers, Deer Creek is little developed at the present time. The large area of the park is primarily open farm land in natural succession with some wooded ravines and a ridge, known as Tick Ridge, It lies on a thick glacial till plain dissected by Deer Creek, a tributary of the Scioto River, The stream has a profile of cut banks, alluvial plains and out wash deposits typical of glaciated areas. No trails have been developed but Tick Ridge and picnic facilities are close to the dam site. The 1277 acre lake is open for boating and fishing. In addition to more facilities, plans call for reforestation to augment the young mixed hardwood woodlots already there.

Contact: Caretaker, Deer Creek State Park Rt. 1, Mt. Sterling, Ohio 42143 Phone: (614) 869-2288

A. W. MARION STATE PARK

Location: Off U.S. 22, East of Circleville. 412 acres

A dam on Hargus Creek, a tributary of the Scioto River, created a picturesque little lake of 145 acres. The area lies on glaciated land which has thick deposits of till. The topography is gently rolling; a good beech-maple woodland and old fields in natural succession provide habitat for wild-flowers, birds and small mammals. Waterfowl are seen on the lake during migration. A large glacial erratic with a bronze plaque dedicates the park to the memory of Ohio's first Director of Natural Resources.

Contact: Manager, A.W. Marion State Park

Circleville, Ohio 43113 Phone: (614) 474-3386

TEAYS VALLEY RANCH-CAMP

Location: On Ringgold-Northern Rd., East of U.S. 23. 60 acres

This site is one with many field trip possibilities. It was the original location of the first township school and the first grist and logging mills, with the mill wheel still at the mill race in the valley. The brick home was built in 1850 and the bricks of the school house were used as an addition to the main house. In addition to the historical aspects the area is a wildlife refuge and bird sanctuary as well as a farm with farm animals and riding horses, a summer ranch camp and an outdoor education center for boys and girls ages 9-16. The region is glaciated, the terrain flat to hilly. Turkey Run Creek dissects the property providing exposures of the Mississippian age sandstones and shales that lie below the glacial deposits. A great variety of hardwoods, conifers, softwoods, nut and fruit trees as well as numerous flowering plants and shrubs may be seen. Two ponds stocked with bass and blue gill furnish habitat for aquatic plants and animals. Open meadows give the third major habitat for study.

Covered wagons provide housing accommodations at each campsite; hiking trails and picnic facilities are available.

Contact Harry & Jane Feldman, Owner and Manager Teays Valley Ranch

Rt. 2 Ashville, Ohio 43103

PIKE COUNTY

THE BUCKEYE TRAIL

Location: From Co. Line to Cynthiana to U.S. 23.

The blue blazes of the Buckeye Trail cross rugged country where the Allegheny Plateau begins and streams have highly eroded through the resistant sandstone formations. It goes through Baker Fork gorge and past the boundary of glaciation to Cynthiana. Its pathway keeps to the northern part of the county over hilly, wooded terrain to Pike State Forest, Pike Lake and Pike State Park, Deer, wild turkey and grouse may be seen en route. At the park is a museum shelter, campground and picnic facilities, Green Ridge fire tower might be utilized to get a panoramic view of the country-side. From there the trail cuts up to Nipgen in Ross County, then skirts the edges of both counties along little used roads, leaving the county at U.S. 23 as it proceeds north. Many historical sites may be seen, among them a bona fide German cemetery. For maps and further information contact:

Buckeye Trail Association 913 Ohio Depts. Bldg. 65 S. Front St. Columbus, Ohio 43215 Phone: (614) 469-3984

CAVE LAKE PARK

Location: Off SR 124, SE, of Sinking Springs, 200 acres

Designed to be used but still permitting natural features to remain natural, this park seems to show that the owners have achieved their goal. One natural attraction is a large cave with its entrance near the lake which in itself is an outstanding feature. Covering 40 acres the lake is surrounded with natural forest and a pine and cedar grove. The extensive woodland is oak-sugar maple forest type with many species in the association. Unusual flowers, ferns and song birds may be studied from the hiking trails. Deer and wild turkey are reported to be in the area. The area is beyond the boundary of glaciation; the hills capped with sandstones. The streams have eroded through to the Ohio shale below. Groups may hike through the park free of charge.

Contact: Manager, Cave Lake Park Rt. 4, Hillsboro, Ohio 45133 Phone: (614) 335-1490

KINCAID FISH FARM

Location: On SR 124 East of Sinking Springs. 213 acres land 11.5 acres water

Kincaid Springs, the location of this hatchery and fish farm, is one of the finest in the state. In this region where the hills are capped with the sandstones of early Mississippian age and the streams have eroded through the Ohio shale below exposing the Silurian dolomite formations, springs occur. The source of the water is probably the porous Niagara. This spring has an average flow of 1900 gallons per minute and an average water temperature of 52 degrees, fluctuating only about 9 degrees during a year. The name of the hatchery originates from John Kincaid, one of the first migrants who settled near the spring in 1797, after the Revolutionary War. The farm has been in operation since 1935. It was primarily a bass farm until 1953 when muskellunge were successfully hatched artificially. Production has increased stead-



Bainbridge, Ohio 45612

Phone: (614) 634-2863

ily ever since. In addition to the spring and the fish production process, waterfowl and song birds may be observed. Aquatic plants and animals in addition to fish may be studied.

> Contact: Manager, Kincaid Fish Farm Latham, Ohio 45646

Phone: (614) 493-5063

PIKE FOREST AND STATE PARK

the premises.

Location: Between U.S. 50, South of Bainbridge and SR 124, West of Piketon.

Forest 10,586 acres; Park 500 acres

farmhouse, a four room cabin on a hill and a pond for swimming are available. There is no charge for a field trip through

Contact: Manager, Overlook Hills Farm

This extensive forest in the northwest part of the county was established in 1924 with the objective of returning abused and fire damaged timberland back to productive forest. It is situated on hilly terrain just beyond the boundary of glaciation. The sandstone which tops the hills belongs to the Waverly group of Mississippian age. The streams have eroded through to the Devonian age Ohio shale below. The oakhickory forest type and associated shrubs and wildflowers cover the south facing slopes; north slope vegetation ix mixed mesophytic with beech, white basswood and tulip tree in the association. A fire tower is accessible.

The state park with a 13-acre lake is on the northeast corner of the forest. Hiking trails have been developed around the lake and into the woodland where the trees and abundant wildflowers may be seen. A nature program is conducted during the summer months.

Contact: Manager, Pike Lake State Park

Rt. 2

Bainbridge, Ohio. 45612 Phone: (614) 493-4201

PORTAGE COUNTY

THE BUCKEYE TRAIL

Location: From SW. corner, East and North to Geauga Co.

The blue blazes of the trail in this county are found on country roads. The area is heavily glaciated and underlain by the sandstones, shales, and limestones of Pennsylvanian age. Evidence of the great kame belt which is a broad band of silt, sand, and gravel deposited in depressions of the wasting glacier may be seen along Mogadore Reservoir. The Kent end moraine of the Wisconsin ice sheet is crossed en route to West Branch State Park, east of Ravenna. The trail turns north to the Geauga County line, after making a loop through a lovely wooded area at the park. Facilities are available at the park.

Contact: The Buckeye Trail Association 913 Ohio Departments Buildil g Columbus, Ohio 43215 Phone: (614) 469-3984

CAMP ASBURY

Location: On Asbury Rd., South of Hiram. 305 acres

Camp Asbury possesses a wealth of potential outdoor education experiences as well as excellent winterized facilities. The site lies on glaciated, rolling and dissected Allegheny Plateau. The Sharon conglomerate is beneath a thin layer of glacial till. Eagle Creek, a tributary of the Mahoning

LAKE WHITE STATE PARK

Location: On SR 104 and 551, 2 miles south of Waverly, 360 acres

The twisted 337 acre Lake White was formed by impounding the waters of Peepee Creek almost at its confluence with the Scioto River. Only a small land area surrounds the lake and there is little natural vegetation. The park has many camp sites on the hillside overlooking the lake.

Contact: Manager. Lake White State Park Box 130 A, Route 2 Waverly, Ohio 45690 Phone: (614) 947-4059

McALLISTER ANGUS FARM

Location: On SR 772, 5 miles North of Rarden. 150 acres

Raising beef cattle while using conservation practices seems to be the challenge for this farm. Grazing and cropland constitute half the acreage; the remainder is in woodland. The farm is beyond the boundary of glaciation lying in the rolling hills and valleys at the western edge of the Allegheny Plateau. The thin residual and acid soils are underlain by the sandstones and shales of Mississippian age. The sandstone locally shows concentrations of iron oxide. The dominant woodland trees are mixed oak with birch, maple, cherry, hickory, walnut, dogwood, shadbush, and sassafras in the association. Lowlands are typically wooded with sycamore, poplar, redelm, blacklocust, papaw, and persimmon. Hiking trails lead to displays of wildflowers such as lady slipper, cohash, wild geranium, and iris, with many ferns in the woods and rocky places. The abundance of wildflowers in the spring and the many trees dressed in autumn reds make these spasons preferable for field trips. A small cottage with a wood stove may be used in winter.

> Contact: McAllister Angus Farm Rt. 1 Otway, Ohio 45657 Phone: (614) 493-5161

OVERLOOK HILLS FARM

Location: On Potts Hill Rd., 4 miles South of Bainbridge. 650 acres

This rolling country estate is recognized as a Certified Tree Farm, a conservation cropland farm and a vacation farm. It is situated near Pike Lake and many other points of interest but contains a wealth of educational and fun things to do. The hiking trails lead to an Indian camp site and sandstone cliffs, to Bear Wallow Spring and an orchard pond, or to Iron spring, a sugar bush, and a tract of timber demonstrating proper forest management. Ferns and wildflowers in the ravines and big woods are abundant. Here, too, are found squirrel, rabbit, grouse and quail. A large modern



River runs through the area making interesting ravines with intermittent streams flowing over falls. A large swamp and an old mill pond add to the aquatic habitat. Most of the area is wooded, the trees in various stages of growth, Beech, maple, and wild cherry are dominant. About 15 acres of conifers at least 20 years old provide good birding. Wildflowers are abundant in sea, on and woodland animals are numerous. Kame deposits of sand and gravel are present, a working pit is on the property. An old maple sugar bush is present and a four acre pond and open fields in natural succession complete the list of habitat. Three lodges and numerous cabins furnish eating and sleeping accommodations.

Contact: Camp Manager 10777 Asbury Road Hiram, Ohio 44234 Phone: (216) 569-3171

CAMP CARL

Location: Off SR 14, South of West Branch State Park. 240 acres

Rolling meadows and broad athletic fields at this camp provide a sense of open space. Tucked behind a large lodge is a wooded ravine with a stream which is blocked to form a five acre lake. Cabins are scattered through the woods near the lake; the forested area extends on from there covering many acres. Hiking and riding trails give access to all parts of the property.

Contact: David E. Fair, The Chapel on Fir hill 135 Fir Hill, Akron, Ohio 44304 Phone: (216) 678-8800 or 253-3515

CAMP HI

Location: On Abbott Rd., North of SR 82 West of Hiram. 53 acres

A large wooded area and an exceptionally fine waterfront on the Cuyahoga River are nature highlights of this camp. It lies on the glaciated and rolling Allegheny Plateau at the highest spot in the county. The area is dissected by the river and its tributaries. The camp trails and program extend into a large acreage adjoining. The region is underlain with the Sharon conglomerate, the basal member of the Pennsylvanian series of rocks. Five springs and two creeks add to the river for aquatic habitat. A camp farm provides studies in agricultural methods and animals. Riding horses and canoes are available for "unusual" field trips. The lodges and sleeping cabins are beautifully situated in the mixed oak woodland but they are not winterized.

Contact: Manager, Camp Hi 3599 Randolph Rd. Cleveland Heights, Ohio 44121 Phone: (216) 381-5259 Or (216) 569-7621

CENTERVILLE MILLS YMCA CAMP

Location: On SR 306, North of Aurora, 300 acres

Rich in legend, geologic history, and varieties of habitat, this camp has much of educational value to offer. Centerville Mills, erased by the 1913 flood, was an imposing structure.

built on the rock floor of the Chagrin River near its headwaters. The rock exposed in the bank of the stream and the waterfall are the Meadville shale of Mississippian Age and the Sharon formation which marks the beginning of Pennsylvanian age rocks. The valley through which the river flows was eroded by great volumes of meltwater from the wasting glacier. Because of the cool, moist climate in the valley some species of glacial vegetation such as hemlock have survived. The 300 acres of woodland are in the beechmaple forest type with many wildflowers, shrubs, birds, and small mammals seeking food and shelter there. A 20 acre lake provides habitat for water plants and animals,

The camp has facilities for school camping as well as field trips and is being used for these purposes.

Contact: Manager. Centerville Mills YMCA Camp Cleveland YMCA 2200 Prospect, Cleveland, Ohio 44115 Phone: (216) 771-9900

LAKE ROCKWELL

Location: On Co. Rd. 797, NE. of Kent. 800 acres

This Akron city water supply reservoir is reported to be well suited for all phases of outdoor education, limited only by the resources of the teacher. Vegetative cover other than pines is mostly beech-maple and some oak-hickory in various stages of development. The original cover was swamp forest in the wetter uplands. In a few places actual glacial bog species with tamarack were recorded. There is still a wealth of flora and fauna to be seen. Both resident and migratory waterfowl use the lake; whistling swan always stop for a few days on their way to the Arctic.

In the pines around the lake, some 30 or 40 years old, are many song birds, also. The area is underlain by Pennsylvanian age sandstones and shales with heavy glacial deposits and alluvium almost completely covering the bedrock. Both glacial till, unsorted deposits containing clay as well as silt, sand and gravel, and kames which are sorted waterlaid materials deposited in the wasting glacier are present.

Rockwell is closed to the public and does not have facilities. Permission will be given to classes wishing to do serious studies.

> Contact: Manager, Akron City Waterworks 65 South High Street, Akron, Ohio 44308 Phone: (216) 375-2590

MOGADORE RESERVOIR

Location: On SR 526 and 43. 1,015 acres

Lake Mogadore, formed by impounding a branch of the Cuyahoga River for an industrial water supply, is used by students for outdoor education studies as well as recreation. The large reservoir has both resident and migratory waterfowl and in the pine plantations around it are many song birds. Vegetative cover includes, also, beech-maple and oak hickory trees in various stages of succession. The original cover was swamp forest with glacial bogs in the kame—kettle topography. The whole area is within the kame sand and gravel belt, material deposited by streams within the wasting glacier, Some deposits are being exploited for sand and gravel.

Contact: Manager, Akron City Waterworks 65 South High St., Akron, Ohio 44308 Phone: (216) 375-2590



NELSON-KENNEDY LEDGES STATE PARK

Location: On SR 282 NE, of Garrettsville, 167 acres

The outstanding feature of this park is its prominent outcrops of Sharon conglomerate. This is the basal member of the Pennsylvanian system deposited on or near the shores of a broad shallow sea on a land surface which had been eroded for a long period of time. The region then subsided and was covered again by the sea. Subsequently uplifted the rock layers have been submitted to the process of erosion for some 300 million years. This part of Ohio was covered by ice sheets, the last of which wasted back 10,000 or more years ago. The glacier-fed streams contributed greatly to the exposure of the Sharon member, the scenic overlooks and bluffs a result of the resistance of the formation to weathering and erosion.

Vegetation in the park is primarily beech-maple climax forest which has a rich display of wildflowers in season. A self-guiding hiking trail brochure contributes to the value of the site for field trips.

Contact: Manager, Nelson-Kennedy Ledges State Park Rt. 2, Garrettsville, Ohio 44231 Phone: (216) 548-5085

WEST BRANCH STATE PARK

Location: SR 5 East of Ravenna. 6.447 acres

West Branch Reservoir comprising 2,650 acres of the large park was created by placing a long earth-fill dam across the tributary of the Mahoning River. The area is largely old abandoned farm fields interspersed with woodlands of the beech-maple forest type. The region has been glaciated and its topography gently rolling. It is underlain by the Sharon conglomerate member of the Pennsylvanian System of rock formations. The soils are dominantly acid.

Swamp areas at the edges are available for study as wellas woodland and field habitats. The services of a naturalist are available in the summer only.

> Contact: Manager, West Branch State Park 5708 Esworthy Rd., Rt. 6, Ravenna, Ohic 44266 Phone: (216) 296-3239

PREBLE COUNTY

CAMP MYRON KAHN

Location: On Swan-Beatty Rd., 3 miles South of Camden. 86 acres

This Boy Scout camp is situated on glaciated land underlain by the hard limestones and dense shales of the Richmond formation, strata of Silurian age. A creek running through the camp has eroded through the glacial deposits showing exposures with many fossils. Forty acres of woodlands contains many trees native to Ohio which include maple, oak, elm, sycamore, tulip, wild cherry, buckeye, ironwood, poplar, and others. Wildflowers are abundant; birds are common as determined by season; small animals are present. Good habitat for aquatic plants and animals is provided by both the creek and a small lake. Hiking trails extend into the forest. There is a large lodge which is not winterized.

Contact: Camp Director, Dan Beard Council, Boy Scouts of America 3007 Vernon Place, Cincinnati, Ohio 45219 Phone: (513) 961-2336

FORT ST. CLAIR STATE MEMORIAL

Location: On SR 122 and 355, 1 mile West of Eaton. 89 acres

Fort St. Clair was built in 1792, one of a line of small supply forts which served as an American military lifeline established to win the old Northwest from Indian and British control. To the west of the fort site is a very large tree, known as the "Whispering Oak". Legend has it that the rustling leaves tell the story of the men who died there. A bronze tablet on a glacial erratic relates the story of the site in a different way.

A nature preserve lies at the west end of the area, it consists of 12 acres forested by beech, maple, and red elm together with a profusion of wildflowers and undergrowth. It was given by the Preble County Historical Society as a preserve, an example of the forests which covered the area when the fort was built. A small stream meanders through the property; glacial rocks large and small are in and along it. Agricultural land lies on one side and a conifer plantation is seen from the roadway.

Facilities are well situated, some of them beside rock exposures of the Niagara dolomites of Silurian age.

Contact: Manager, Fort St. Clair State Memorial Rt. 3, Eaton, Ohio 45320 Phone: (513) 456-2353

IMES PARK

Location: On the Eaton-Lewisburg Rd. 78 acres

A small picturesque park which has been in existence for 50 years contains much of interest. The stream has eroded through the covering of glacial till exposing the resistant dolomite rocks, forming a waterfall here as in many other places along the Niagara Escarpment. The soils are high lime in content and support the typical vegetation. Trees are in the beech-maple forest type.

Contact: Reese Centers 6588 Eaton-Lewisburg Rd. Lewisburg, Ohio 45338 Phone: (513) 962-2710

RUSH RUN WILDLIFE AREA

Location: On Co. Rd. Northern, 5 miles SE. of Camden. 1,183 acres

Rush Run, the process of glaciation, and Ordovician rock strata combine to create an environment rich in natural history. Fossils are found in the rock formations exposed in road cuts and in the bed of the creek. Upland areas are wooded primarily in oak, hickory and beech. Rabbit, pheasant, quail, squirrel and other upland game species are present. Several small ponds provide habitat for fur animals, fishing and waterfowl during the spring and fall migration. A 54 acre lake has been developed recently, the trees and brush left in to provide a preferred habitat for waterfowl and fish. Many aquatic and flood plain plants may be studied.

Contact: Manager, Rush Run Wildlife Area 1889 Northern Road Somerville, Ohio 45064 Phone: (513) 726-6795



WOODLAND TRAILS SCOUT RESERVATION

Location: On Casper-Somers Road, 5 miles South of Eaton. 2.000 acres

This large reservation is almost all wooded in the beechmaple forest type with many other species present. The area is glaciated and the underlying dolomitic rocks in which fossils are found, are exposed in the streams. A large lake is used for canoes and sailing but provides good habitat for water plants and animals. Hiking trails lead into the woodland where wildflowers are abundant and birds and small mammals may be seen. A conservation plan has been worked out with the County Soil Conservation Service, the results of which may be followed with interest. Buildings are not winterized but the reservation is ideal for day outings or field trips.

> Contact: Director of Programs Miami Valley Council. Boy Scouts of America 184 Salem Avenue, Dayton, Ohio 45406 Phone: (513) 461-5230

PUTNAM COUNTY KALIDA FISH AND GAME FARM

Location: On SR 694 North of Kalida. 40 acres

This acreage, managed for wildlife, provides a number of interesting study areas. The farm is on glaciated smooth lake bed, a part of the "Black Swamp" region. The soils are formed from clay deposits, poorly drained. This accounts for the natural marsh on the property which is maintained for nesting waterfowl, rabbits, pheasants and quail. Wood duck and goose boxes are located advantageously to encourage nesting on the site. A four acre pond with water pumped from a drainage ditch to keep it supplied has good fish, emergent vegetation and other organisms for observation. An anmowed field with conifer and multiflora rose borders give good bird and rabbit protection. The oak-hickory forest association of trees is maintained on this part of the property. The use of a winterized club house may be requested if necessary.

Contact: Manager, Kalida Fish & Game Club Box 57, Kalida, Ohio 45853 Phone: (419) 532-3412

LEIPSIC HUNTING AND FISHING RESERVE

Location: On Co. Rd. H, 3-1/2 miles NW. of Ottawa. 40 acres

Enhanced by its proximity to the Kildare Golf Course which increases the cover for wildlife, this property has natural habitats in the woods, lake and open fields. Hickory, walnut, maple, locust, multiflora rose borders and pine plantation provides food and cover for birds and small mammals. The 3-1/2 acre lake is rich in aquatic plant and animal life. The area lies on the level, glaciated Lake Plain province in the Black Swamp region. It is underlain by heavy clayey soils and dolomitic rocks of Silurian age.

A large club house, a camping area, and picnic facilities are available for use upon request, free of charge to nature study classes or youth groups. Such groups are invited to contribute in planting trees or shrubs for wildlife protection and food,

Contact: Herbert Hoover, President Rt. #2, Leipsic, Ohio 45856 Phone: (419) 653-3137

LEIPSIC RESERVOIR

Location: 3 miles East of Leipsic. 40 acres

A 30 acre reservoir was constructed on a branch of Beaver Creek by the railroad to impound water for the engines. The lake and property are now leased to the Leipsic Conservation Association but school groups are invited to use it. Trees and birds may be observed around the lake and creek. Aquatic plants and animals abound,

Contact: Superintendent. Board of Public Affairs
City of Leipsic. Ohio 45856
Phone: (419) 943-2704

OTTOVILLE QUARRIES

Location: On U.S. 224 at Ottoville. 6 acres

The area is composed of two limestone quarries and a small stream impoundment on the Little Auglaize River. Stocked fish populations in the quarries are composed of bass, bluegills, walleyes and crappies with crappies, suckers, bullhead and carp in the stream. The west quarry is shallow with an average depth of 2 feet, while the east quarry is quite deep ranging to 65 feet. Thermoclines are recorded in the east quarry with insufficient oxygen to support fish life during the summer months. Waterfowl are observed during migration. The original vegetation on the flat Lake Plain was elm-ash swamp forest. The land cover now is generally small trees and brush.

Contact: Division of Wildlife District 2 Office 952 Lima Ave., Findlay, Ohio 45840 Phone: (419) 422-6757

RICHLAND COUNTY

CAMP AVERY HAND

Location: On Orweiler Rd. 10 miles SW. of Mansfield. (plus Clear Fork Reservoir property) 217 acres

This property is adjacent to and includes tail water c. Clear Fork Reservoir. In addition it has its own wildlife pond, hardwood forest and pine plantations of various ages. It is situated on the glaciated, dissected Allegheny Plateau with Mississippian sandstones exposed in the ravines. Open fields contribute to the diversity of wildlife and plants. The camp has a large winterized lodge with food service facilities, hiking trails, and a picnic area away from the camp. School camping is being conducted several weeks of the year. For information or arrangements contact:

Scout Executive, Boy Scouts of America 445 W. Longview Ave. Mansfield, Ohio 44902 Phone: (419) 522-5091

CAMP MOWANA

Location: On Fleming Falls Rd., off U.S. 42, NE. of Mansfield. 166 acres

This camp is in a picturesque setting which includes Fleming Falls. Two streams have eroded through the Mississippian age sandstones and shales and where they meet the falls.



are formed. In addition to being rugged in topography, a large portion of the property is wooded in the mixed oak forest type with many species in its association. A pond and open fields provide variety in habitat for aquatic plants and animals, wildflowers, and small woodland animals.

The property has three winterized lodges capable of housing 76 persons

Contact: Rev. Kenneth Larkin, Manager

Rt. 2

Mansfield, Ohio 44903 Phone: (419) 589-7406

CAMP TEMPLED HILLS

Location: On Durbin Rd., 1-1/2 miles SE, of Bellville, 218 acres

Rolling hills above the Clear Fork valley, which has eroded through Mississippian age sandstones and shale, make upicturesque setting for this camp. The area lies on the glaciated, deeply dissected Allegheny Plateau within the boundary of the Illinoian drift, east of the border of Wisconsin end moraine. The Illinoian ice sheet left a thin cover of material on the hills, but thick deposits of sand and gravel in the valley. A small pond and stream provide habitat for aquatic plants and animals. Fifty percent of the acreage is in beech-maple and oak forest and a white pine plantation. Fields with new plantings and in natural succession give the third major life environment. The facilities include a large winterized lodge with sleeping arrangements for 30 persons and food service; a renovated barn sleeps 30 more persons; and a small staff house accommodates 16 more. The camp has decentralized cabin units, covered wagons, hogans, and shower houses. Beautiful hiking trails lead through the rugged woodland where many large hickories, beech and oak trees, wildflowers, birds, and small mammals may be found.

> Contact: Manager, Camp Templed Hills Bellville, Ohio 44813 Phone: (419) 886-2380



HIDDEN HOLLOW CAMP

Location: On Possum Run Rd., East of I-71, 492 acres

Situated on a glaciated hilltop underlain by the resistant sandstones of Mississippian age, this camp has a panoramic view and many desirable features for school camping. A natural lake, a stream with erosional and depositional features including waterfalls, many acres of woodland with mixed oak and oak-sugar maple forest types may be observed. Wildflowers and flowering shrubs in profusion, large pine plantations, open fields in natural succession, small mammals, birds-of-the-field, and edge-of-the-forest, and a cemetery provide for rich experiences. A large modern winterized lodge, two dormitories with showers, cabins, and a staff house complete the list of appointments.

Contact: Director, Hidden Hollow Camp 380 North Mulberry Street Mansfield, Ohio 44902 Phone: (419) 522-0521

CLEAR FORK RESERVOIR

Location: On SR 97, 1 mile West of Lexington. 1.000 acres—water 1.000 acres—land

This reservoir was built by the city of Mansfield for water supply on a stream whose direction of flow was reversed by glacial end moraine. The land surrounding the present lake is rolling and wooded with trees of the beech-maple forest type with many other species introduced. Wildflowers and small animals are typical of wood, field and water habitats. Water fowl are plentiful during migration periods.

Contact: Manager, Clear Fork Reservoir Rt. 7, Lexington, Ohio 44904 Phone: (419) 884-1408 Camping Contact: Clearco Inc. Phone: (419) 526-9300

KINGWOOD CENTER

Location: In Mansfield at 900 Park Ave. West. 47 acres

Kingwood Center is an outstanding area famous for its development of plants suitable for the home garden. Featured in the herbaceous displays are annuals, perennials, ornamental trees and shrubs. One unusual tree is "the fossil tree that lives", a large dawn redwood (Metasequoia glyptostroboides). A large pond and wildlife collection includes many upland game birds, pea fowl, ducks and pheasants. A natural woodland with a trail and open meadows complete the diversity in habitat. A full time naturalist is available for nature trail guided tours. There is no charge. Facilities include a room available for catered or sack lunches,

Contact: Director, Kingwood Center 900 Park Ave. W., Mansfield, Ohio., 44903

Phone: (419) 522-0211





THE LOUIS BROMFIELD MALABAR FARM

Location: Off SR 603, on Bromfield Rd., North of Butler, 595 acres plus 120 acres lease land.

Malabar Farm lies among rolling hills of the glaciated Allegheny Plateau, cut deeply by meltwater streams from the glaciers. On the hills the deposits are thin, but the fill of silt, sand, and gravel in the valleys is thick. The hills are underlain by the earliest resistant sandstones of Mississippian age which are responsible for the change in topography from the flat plains a short distance west.

In such a physical environment, farming can be difficult. Louis Bromfield, after a highly recognized literary career which well could have continued, returned to his home country to develop successful methods of farming. He purchased four wornout farms, corrected the soil erosion, enriched the fields, increased the nutrient value of foods, and thus advanced not only agriculture but conservation and ecology as well. A foundation has continued his program, and the results make a field trip of great value. A visit to the unusual home and library as well as the fields, woods, streams, and lake is exciting and educational in many ways. Arrangements can be made for a trip around the farm in a tractor-pulled wagon.

Contact: Director, (May 10 to Nov. 1)
Malabar Farm Foundation, Rt. 1,
Lucas, Ohio 44843
Phone: (419) 892-2784
Nov. 1 to May 10, Contact: 1477 Wyandotte Rd..
Columbus, Ohio 43212
Phone: (614) 488-9678

MANSFIELD SEWAGE PLANT

Location: East of Mansfield. 30 acres

With studies of pollution an important part of a student's education, it is fortunate to have a treatment plant willing to conduct guided tours. The tour is so arranged that the step by step process is easily understood. This is a 15 million

gallon per day plant of the active sludge type giving a complete treatment. Arrangements are made through:

Contact: David Conant, Manager Mansfield Sewage Plant 385 South Illinois Avenue Mansfield, Ohio 44905 Phone: 419 589-2830

MANSFIELD WEATHER STATION

Location: On SR 13, South at Terminal Bldg, Municipal Airport,

Teachers of earth science and other classes may arrange with the personnel to provide a complete and interesting explanation of the weather station. The station is a part of the 1691 acre airport. Food dispensers are available.

Contact: Manager, ESSA Weather Bureau

Box 212

Mansfield, Ohio 44901 Phone: (419) 522-7070

PINE VALLEY ZOO

Location: On Fleming Falls Rd. near U.S. 30 N. (East of Mansfield).

2 acres plus

The purpose of this small zoo is to give children an opportunity to see, touch and feed the small animals which have been familiar to all in the past. The zoo is out of the city on a hillside, part of it in a pine plantation where picnic facilities are available. A small pond has ducks, geese, and a swan in it. Garden clubs, interested in contributing to the program, have planted trees, shrubs and flowers in the area around the pond. Although the area has definite limitations for a broadly based program it serves its purpose. School classes seem to find the experience satisfying. There are special rates for school groups.

Contact: Manager, Pine Valley Zoo 749 Fleming Falls Rd. Mansfield, Ohio 44905 Phone: (419) 522-1396

RICHLAND RURAL LIFE CENTER

Location: On Orall Rd., 5 miles NE. of Mansfield. 80 acres

The former farm with rich habitats in woodland, field, stream and pond is well used in spring and fall by 6th graders from the Mansfield public schools for outdoor education. Picturesque ravines with 20 foot sandstone walls and overhangs make an interesting geology story. The region lies on the glaciated moderately dissected Allegheny Plateau, a feature observable in the valleys and hills as one leaves the flat till plain on the west. The property had a deciduous woodland of mixed hardwoods with oak and sugar maple predominating. Wildflowers, birds and small mammals may be seen. A one acre pond provides water for the study of aquatic plants and animals. A winterized lodge with a large meeting room is available.

For school camping or field trips contact:

Manager, Richland Rural Life Center Extension Service Office 523 Park Ave., East Mansfield, Ohio 44905 Phone: (419) 524-1351



SHELBY MUNICIPAL WATER WORKS

Location: On North Gamble St., Shelby. 3 acres

For a better understanding of water sources and treatment, a tour of this operation may be arranged. The main source of water here is surface water stored in two reservoirs and softened by the lime-soda ash process. At the treatment plant is a chemical building where water and chemicals are mixed. From there the water flows to two flocculating and settling tanks. Filter treated water is stored in a 500,000 gallon clearwell until needed.

Contact: Water Works Manager City of Shelby, Ohio 44875 Phone: (419) 342-4085

WOOSTER PRESBYTERY CAMP

Location: Off SR 95. on McCurdy Rd. (Co. Rd. 378) SW. of Perrysville. 270 acres

This camp, with winterized lodge and dormitories, recently became the site of the Mohican School In The Cut-of-Doors. Situated on the shore of Pleasant Hill Lake, the site also includes creekbeds, fields, forests, and a pond. The topography of the area is rolling, the result of erosional processes on the sandstones and shales of Mississippian age as well as the process of glaciation. On this property is a unique spot where deposits of two ice sheets, the Wisconsin on the north, the old Illinoian on the west, come together in a sharp angle, termed a reentrant. As an outdoor laboratory, the camp provides a setting for studies of soil, weather, astronomy, geology, and wildlife, Pleasant Hill Dam with its unique "morning glory" spillway and the adjacent Mohican State Forest and Park provide additional study possibilities.

Schools interested in a field trip or enrollment in the prgram, contact:

Mohican School In The Out-of-Doors McCurdy Road, Route 2, Box 150 Perrysville, Uhio 44864 Phone: (419) 938-8720

ROSS COUNTY

ADENA STATE MEMORIAL

Location: Off SR 104 at Allen Ave., NW. of Chillicothe. 300 acres

This early 19th century estate of Thomas Worthington was called "Adena", a Hebrew name given to places remarkable for the delightfulness of their situations. Situated on a hill, the mansion faces the series of sandstone-topped hills just north of Chillicothe, the view which served as an inspiration for Chio's Seal. The estate became a state memorial in 1946. Recent additional restoration of the farm complex has increased its historical and esthetic value. The beautiful house and large barn are complemented with gardens, orchard, many species of trees, rocky ravines and woodland. The estate is open April through October, closed on Mondays. School groups are admitted free.

Contact: The Ohio Historical Society 17th & I-71

Columbus, Ohio 43211 Phone: (614) 469-4663

THE BUCKEYE TRAIL

Location: From Scioto Trail State Park and Forest NE. through Tar Hollow State Forest and Park. 27 miles

The Trail leaves Pike County and enters Ross near the Scioto Trail State Forest. The topography consists of rounded hills and broad valleys, the hills topped with the resistant sandstones of Mississippian age. The area is beyond the line of glaciation with sandy residual soils on the upland. The wooded areas are oak-hickory forest type with tulip trees. sassafras, dogwood and sour gum in the association, Facilities are available at the Stewart Lake picnic and camp areas. Near the eastern edge of the forest is a "hikers only" branch of the trail which ascends a very steep hill. This knob abounds in spring wildflowers. Here one can look eastward across the broad Scioto River flood plain and the pre-glacial Teays River valley, From here on north for some distance the Teays and Scioto valleys coincide. Several high hills known as outliers or monadnocks, because they rise above the level of most of the hills, may be seen. Mt. Logan, depicited on the Ohio seal, is in the distant north, At Highy Bridge the trail crosses not only the Scioto River but the Ohio and Erie Canal. Here the canal stood 573 feet above sea level, the same level as the surface of Lake Erie, Beyond U.S. 35 the trail traverses a lovely wooded area where ridges afford good views of both valleys. Relic prairie vegetation appears in a few spots at high elevations. Deer and grouse are plentiful. Vigo fire tower, southwest of Londonderry just off the trail, offers one of the finest panoramas in Ohio. From here the blue blazes lead north through Tar Hollow State Forest. At Dogwood picnic area and at the Tar Hollow fire tower facilities are available.

For further information and maps contact:

Buckeye Trail Association 913 Ohio Departments Building 65 S. Front St. Columbus, Ohio 43215 Phone: (614) 469-3983

CAMP VALLEY VISTA

Location: Off SR 41, 1 mile North of U.S. 50, on Tong Rd. 22 acres

Valley Vista is aptly named for it lies in the broad Paint Creek valley adjacent to wooded hillsides. It is a sports camp, primarily, where boys are given instruction and players are trained in baseball, basketball, and golf. The area is rich in natural history and field trips or school camping can be negotiated.

The woodlands are in the beech-maple forest type with flood plain species such as sycamore, elm, ash, and cotton-woods along the stream. The forest type is typical of the soils derived from Illinoian glacial till found characteristically in this part of the county. An intriguing geology story involving two glaciers, stream reversal, a great volume of meltwater, and the underlying dolomite rock formations, is the basis for a tremendous ecologic study of the area.

For field trips or overnight arrangements, contact:

Bill Boatman, General Managar Bainbridge, Ohio 45612 Phone: (614) 634-2302



CHILLICOTHE SCHOOLS LAND LABORATORY

Location: At 455 Yoctangee Pkwy.. North of Administration Bldg. 24 acres

A section of the old Ohio Canal provides a unique site for the school arboverum which is being developed here. Students and staff have planted many species of trees, wildflowers and bulbs. They have cleared and made trails for easy access and brought in glacial boulders. A pamphlet has been prepared explaining the soils, trees and plantings,

> Contact: Mrs. Margaret Bobzion, Director 455 Yoctangee Pkwy., Chillicothe, Ohio 45601 Phone: (614) 773-2281

DAUGHTERS CONSERVATION AND WILDLIFE AREA

Location: On Baptist Hill Rd. off SR 772, 6 miles SW. of Chillicothe.

87 acres

A private retreat on property designated as a wildlife preserve is shared with groups interested in nature study. The area is bounded by 163 acres of Mead Corporation timberland which contributes to its value as a wildlife refuge. Part of the hillside property is wooded in the oak-hickory forest association; the remaining acreage is being reforested with conifers. Five soil types are reported to be present resulting from the glaciation process. Baptist Hill Road, known in 1800 as Limestone Road, was used as a former stage coach highway. A three acre lake provides swimming and aquatic habitat. A cabin is accessible for facilities or overnight use.

Contact: Carl Daughters Box 78, Chillicothe, Ohio 45601 Phone: (614) 774-2066

MOUND CITY GROUP NATIONAL MONUMENT

Location: On SR 104, 3 miles North of Chillicothe. 67.5 acres

In 1923, this Hopewell pre-historic Indian burial ground was established by Presidential proclamation as a unit of the National Park Service for development and protection. A visitor center contains exhibits to help understand Mound City and the people who built it. An embankment surrounds the mounds beyond the building. Within the enclosure are 24 mounds which contain the evidence of elaborate burial rites of the Hopewell people who flourished for about 1,000 years in the Scioto valley. The culture of these people is best known by their high artistic achievements using many natural materials and for their practice of erecting earth mounds over the remains of their dead. The development along the Scioto River made it possible to use the river for food and transportation by canoe. Trees are on the park-like property and the glacial meltwater-fed Scioto River and its broad valley may be observed here. A map and informational brochure makes a self-guiding tour effective or advance arrangements may be made to receive special services. A set of slides and narrative are available, without charge to school groups,

> Contact: Archeologist, Mound City Group National Monument Box 327

Chillicothe, Ohio 45601 Phone: (614) 774-2541

PLEASANT VALLEY WILDLIFE AREA

Location: On Egypt Pike off SR 104, 3 miles NW, of Chillicothe, 1,414 acres

This area lies on a broad flat upland with its western escarpment covered with oak-hickory forest. It is adjacent to a former north-flowing branch of the Teays River of preglacial age. The region is covered with thick Wisconsin drift with high lime soils, underlain by Ohio shale. There are many species of birds and mammals present. This area is reported to be at the western margin of the range of ruffed grouse (species monticola) and the eastern limit for natural occuring ring-necked pheasant populations.

Contact: Division of Wildlife District 4 Office 360 E. State St., Athens, Ohio 45701

Phone: (614) 593-6933

ROSS LAKE WILDLIFE AREA

Location: On Hydell Rd., 3-1/2 miles East of Chillicothe. 1.110 acres

Lake, croplands, meadows, old fields and oak-hickory, beech-maple woodlands provide a wide variety of habitats for this area. The land is flat to rolling, with soils developed from a thin deposit of Illinoian till over acid sandstone and shale rock strata. The area is reported to be near the western margin of the ruffed grouse range (subspecies monticola).

Contact: Division of Wildlife District 4 Office 360 E. State St., Athens, Ohio 45701 Phone: (614) 593-6933

SCIOTO TRAIL STATE FOREST AND PARK

Location: On U.S. 23, 9 miles South of Chillicothe. Forest -9,151 acres Park -248 acres

These two properties combine to make a very fine natural area. Acquisition began in 1922 for land which had been used as an artillery firing range during World War I. The extensive acreage lies west of the Scioto River on the Allegheny Plateau just beyond the boundary of glaciation. The rounded hills are topped with the early Mississippian sandstones which are responsible for the rugged topography. Dissecting streams give exposures of sandstone and shale. The area is covered by oak-hickory forest types with sour gum, dogwoods and sassafras contributing to a beautiful autumn coloration. Many acres of pine plantation give added cover for wildlife.

The park is a popular one with its dense woodland, rugged topography and Lakes Stewart Hollow and Caldwell. Hiking trails, including a segment of the Buckeye Trail with its blue blazes have been developed through the forest and park. An historical church on the property adds to its interest.

Contact: Manager, Scioto Trail State Park Rt. 5, Box 430, Chillicothe, Ohio 45601 Phone: (614) 663-2521

TAR HOLLOW STATE PARK AND FOREST

Location: Seven miles North of Londonderry on SR 327. 16.126 acres

This extensive reservation is situated in the sandstones and shales of Mississippian age just east of the glacial boundary. The terrain is rugged, covered by oak-hickory and beech-



maple forest types. Streams traverse rocky beds creating diverse habitats. In addition to a wealth of wildflowers, trees and shrubs typical of residual sandstone soils, many animals may be found. Among these are deer, grouse, rabbits and squirrels. Wild turkeys were successfully introduced and other birds are abundant. A small lake was formed for recreation purposes but the edges are rich in vegetation and aquatic animal life. The resident camp area contains a very large rustic lodge with food service facilities. Sleeping cabins are scattered on the hills near the lodge. This area has long been used by schools and agencies for resident outdoor education.

The forest was established in 1936 as one of the federal land utilization projects. A fire tower is a bonus facility for conservation education as well as protection of the forest.

> Contact: Manager, Rt. 1, Londonderry, Ohio 45647 Phone: (614) 887-3879

SANDUSKY COUNTY

ALDRICH POND WILDLIFE AREA

Location: Off U.S. 20, 2 miles NW, of Lindsey.

The area is little more than the dug, shallow pond, situated on the glaciated flat Lake Plain. It has abundant aquatic vegetation including cattails, spike rushes, coontail, myriopyllum, certain potomogetons, filamentous algaes, sagittaria and others. It has been stocked with a wide variety of fish. Aquatic organisms and migrating waterfowl may be observed.

Contact: Division of Wildlife District 2 Office 952 Lima Ave., Findlay, Ohio 45840 Phone: (419) 422-6757

GREEN SPRINGS NURSERY

Location: 1 mile West of Green Springs. 120 acres

This is a forest tree nursery on which are grown approximately five million seedlings annually for reforestation purposes. The nursery was established in 1948 and at the present time the unskilled labor requirements are provided by 30 part-time seasonal women. A field trip has merit for an understanding of the process of seed gathering, planting, transplanting, protection, and distribution.

Contact: Superintendent, Green Springs Nursery, Green Springs, Ohio 44836 Phone: (419) 639-2802 Home: (419) 639-2801

HAYES STATE MEMORIAL

Location: On City Route 6 at the corner of Buckland and Hayes Avenues in Fremont. 25 acres

A field trip to this historic and beautiful wooded estate of Rutherford B. Hayes, 19th president of the United States, could serve a dual purpose, Spiegel Grove became the Hayes home in 1873 after the famous Ohio lawyer had served his second term as governor. A distinguished congressman, governor and president, Hayes' significant achievements were in the reconstruction of the South, in civil service reforms and in strengthening the national currency.

The wooded estate surrounding the spacious home, the tomb, the library and the museum contains a section of a famous Indian trail (the Sandusky-Scioto Trail which extended from the Ohio River to Lake Erie). It winds for nearly half a mile through the grove of majestic hardwood trees. On a quiet wooded knoll is a Vermont granite monument. Many of the great trees have been named for famous Americans who visited Spiegel Grove, a custom initiated by President Hayes which continued after his death. The walks, driveways, planted trees, shrubs and flowers reflect the love of the President and Mrs. Hayes for their home.

Students of all ages from near and far are invited to visit and enjoy the Memorial. No picnicking is permitted.

Contact: Manager, Hayes State Memorial Fremont, Ohio 43420 Phone: (419) 332-2081

MILLER BLUE HOLE

Location: Off SR 6, 8 miles NE. of Fremont.

This area contains a small blue pool similar to the Blue Hole at Castalia and there is no charge for the visit. The pool is the result of slightly acid ground water penetrating the soluble limestone or dolomite rocks along cracks and bedding planes. The water moves through the rocks forming a network of cavities eventually emerging at the level where the ground water table is exposed. The ground water flowing from the blue hole contains no oxygen until it reaches the surface due to its long trip below the surface. The temperature remains constant all year for the same reason. This makes such pools a haven for waterfowl when Sandusky Bay and the lake encounter winter freeze up. A limited amount of vegetation is found which includes charo and other filamentous algae characteristically found in hard waters. Fish in the upper layer of water are green sunfish and top minnows; the stream flowing from the pool contains such species as sculpin, black nose dace and occasionally rainbow trout. The land surrounding blue hole has vegetation such as brush, small trees and grassland.

> Contact: Division of Wildlife District 2 Office 952 Lima Ave., Findlay, Ohio 45840 Phone: (419) 422-6757



SCIOTO-SENECA

SCIOTO COUNTY

CAMP MOLLY LAUMAN

Location: On Bear Creek Rd., 1 mile West of SR 104, North of Portsmouth, 100 acres

Although this property has been used by Girl Scouts for many years it continues to provide a sense of seclusion and kinship to the natural environment. Situated on maturely dissected hills composed of Mississippian age sandstones and shales, the topography is rolling. Soils are residual, thin and acid but provide the nutrients required for the oak-hickory forest type. The property is heavily forested except for the campus and a field adjacent to the swimming pool. Bear Creek and small stream tributaries give good water environment, erosional and depositional features for study.

A large food service lodge, a Century House, staff house, health cabins, four unit kitchens in late spring and early fall months, and three shower houses constitute the facilities available.

The camp is adjacent to the Mead Experimental Forest of 700 acres which may be used cooperatively.

Contact: Camp Registrar, Seal of Ohio Girl Scout Council 170 North High Street Columbus, Ohio 43215 Phone: (614) 221-3291

MEAD EXPERIMENTAL FOREST

Location: On Bear Creek Rd., 1 mile West of SR 104, North of Portsmouth,
700 acres

This extensive aereage is used for experimenting with various wood harvesting methods. Research is carried on by the U.S. Forest Service in cooperation with the Mead Corporation. The area lies in the unglaciated rolling hills of the Allegheny Plateau, underlain by Mississippian age sandstones and shales which are exposed in the ravines. A roadway extends around the property through the plots of clear cut and various degrees of partial cutting, or not cutting. Signs explaining the program are located at intervals in order that interested people may understand what they are observing. A tour is recommended for high school or adult groups only.

In addition to the forest research, trees in the oak-hickorytulip tree association may be studied. Many wildflowers and animal life are found there.

> Contact: Herbert L. Morgan Mead Corporation, Chillicothe, Ohio 45601 Phone: (614) 772-3422

MILLAR CHRISTMAS TREE FARM

Location: On U.S. 23, 15 miles North of Portsmouth. 160 acres

This beautiful tree farm situated on the unglaciated hill country was granted to the present owner under the Old Virginia Military Survey. A log cabin on the property was built in 1820. The fifty thousand Christmas trees, virgin white oak timber, the bear and buffalo-wallows and rocky ravines are well worth seeing.

Contact: John W. Millar 79 E. State St., Athens, Ohio 45701 Phone: (614) 593-6573

SHAWNEE STATE FOREST AND PORTSMOUTH STATE PARK

Location: On U.S. 52 and SR 125, West of Portsmouth, Forest -57.819 acres: Park -305 acres.

Sometimes called Ohio's Little Smokies this rugged forested area is the largest contiguous woodland in the state. The property lies on the unglaciated, highly dissected Allegheny Plateau underlain by Mississippian age sandstones and shales. It is bordered on the south by the Ohio River which has some small tributaries draining the land. The Scioto Brush Creek on the north cuts through the rock formations to contribute to the extremes in topography. The forest is primarily oak-hickory type with short leaf pine on dry sites. Rabbits, deer, grouse and squirrels are present. Hiking trails extend for 20 miles through the woodland. Panoram Trail follows a high ridge through the most spectacular portion. Special hikes and a nature program are provided at various times of the year. From any of five fire lookout towers thousands of acres of unbroken forest can be seen.

The park on SR 125 contains three lakes; Bear, Turkey Creek and Roosevelt, These occupy about 80 acres. Wildlife and an excellent display of wildflowers may be seen in park and forest.

Contact: Manager, Roosevelt-Shawnee State Forest Box 52 Star Rt. Portsmouth. Ohio 45662 Phone: (614) 858-4933

SENECA COUNTY

CAMP HERTZER

Location: On Co. Rd. 33, 5 miles North of Tiffin.

The camp is situated on the east bank of the Sandusky River which is reported to be too shallow for swimming or boating. Twelve acres are reforested farmland designated as a "wildlife conservation area" which contains 10,000 black walnut, white pine, Carolina poplar and locust trees planted in 1959. Twelve acres are in open grassland with the balance riverbank, an old mill race and woodland. Two deep ravines in their natural condition may be explored along undeveloped trails. Wildflowers, birds and small mammals are normally in residence. Mature trees include several varieties of oak, maple, elm, ash, sycamore, tulip, dogwood and sassafras. The use of the camp, with or without the lodge and facilities, must be pre-arranged with responsible adult leadership assured.

Contact: C.W. Lutz 465 E. Perry St., Tiffin, Ohio 44883 Phone: (419) 447-5963

CAMP PITTENGER

Location: 3 miles East of McCutchenville. 29,5 acres

This property lies on a gently rolling glacial till plain on the banks of the Sandusky River and includes a number of interesting natural features. Wildflowers and animals may



be seen in season. Conservation practices are the most important features to be studied. A lodge is available for spring or fall use.

Contact: YMCA of Tiffin 79 S. Monroe St. Tiffin. Ohio 44883 Phone: (419) 447-8711

CAMP SENECA

Location; On SR 101, 1-3/10 miles NE, of SR 19, 215 acres

A large woodland area on a dairy farm is used as a campground but may serve as a basis for outdoor education experiences. The three major habitats are present, a pond and a creek providing for the study of aquatic plants and animals. Waterfowl are seen occasionally and a mallard hen is reported to have nested by the creek for 5 years. Open fields and meadows may be observed. The wooded area contains beechmaple forest types together with some sycamore, ash, and cotton wood along the stream. Wildflowers are abundant; deer, fox, quail, pheasants and numerous other small animals are observed. The glaciated soils are high in lime content, though poorly drained because of the smooth lake plain surface.

Contact: Don Kessler Rt. 2, Box 189, Clyde, Ohio 43410 Phone: (419) 546-6138

KNOBLAUGH FARM

Location: On Co. Rd. 15 and Pleasant Twp. Rd. 148. 5 acres

This small area provides a study in the changing ecology as trees grow and the associated plants and wildlife change. It is a reforested plot, with deciduous seedlings started ten years ago and conifers four years. The owner will act as guide for class tour or study. A small private lake is adjacent and may be used if advance arrangements are made.

Contact: Mrs. Jean Knoblaugh Rt. 3, Box 271, Tiffin, Ohio 44883 Phone: (419) 992-2553

PLEASANT VALLEY GIRL SCOUT CAMP

Location: On Pleasant Twp. Rd. 76. 98 acres

Situated in the pleasant valley of the Sandusky River, this camp is wooded in the beech-maple forest association on the uplands with ash and elm swamp forest along the stream. The woodland provides sanctuary for many species of birds, some reported to be found rarely in Seneca County. Wildflowers, too, are profuse with some unusual types represented. For field trip or camping the site deserves consideration.

Contact: Camp Registrar Erie Shores Girl Scout Council 42639 N. Ridge Rd., Lorain, Ohio 44055 Phone: Lorain: (216) 233-6112 Elyria: (216) 324-6104

SENECA CAVERNS -

Location: Off SR 269, 3-1/2 miles South of Bellevue. 1,5 acres

Interesting, adventurous, and educational is a trip through the seven, electrically lighted rooms of this cavern. The cave, developed on three levels in the crystalline, thick-bedded Columbus limestone was not formed by solution, but by the separation of the walls of a fissure. The amount of water seeping through the limestone is negligible which is indicated by the lack of stalactites and stalagmites. A subterranean river of considerable depth flows 147 feet below the surface of the ground. There are special rates for school classes and organized groups on weekdays.

Contact: Richard C, Bell Rt, 3, Bellevue, Ohio 44811 Phone: (419) 483-6711

SHELBY COUNTY

LAKE LORAMIE STATE PARK

Location: On SR 362 between Fort Loramie and Minstar. Water = 1,650 acres; Land = 300 acres

Lake Loramie was built as a feeder lake on the old Miami-Erie Canal about 75 years ago. It lies in the glaciated, relatively flat Central lowland province, underlain by dolomitic formations of Silurian Age. The soils are high lime content and agricultural yields are excellent. The north shore is largely farming country but extensive forests have been retained on the south shore. The park is located on the southwest corner where the mixed hardwood forest type includes many oaks and hickory trees. The south shore and Blackberry Island contain good spring wild flowers.

Contact: Manager, Lake Loramic State Park Rt. 1. Minstar, Ohio 45865 Phone: (513) 295-2011

LEIGHTY LAKE

Location: On SR 47 and 66, South of Newport, 12 acres

This is an historically interesting site because the small lake served as a passing station for the canal boats on the Miami-Erie Canal. All land is private except the old tow path. The lake is now stocked for fishing. A study of aquatic plants and animals is feasible.

Content: Division of Wildlife District 5 Office Rt. 3, Xenia, Ohio 45385 Phone: (513) 372-7668

LOCKINGTON LOCKS

Location: At intersection of SR 176 and 132, Washington Twp. 45 acres

Five locks in Lockington and three others on the south are the chief interest in this site. The five adjoining locks of the old Miami and Eric Canal raised or lowered the water level of the canal approximately 65 feet. An aquaduct connected the five to a sixth lying south of Loramic Creek. This aquaduct collapsed about 1909 and the 1913 flood destroyed much of the canal from Lockington to Piqua. The Ohio His-



torical Society has restored about 1.2 miles extending from the southern edge of the Johnston farm north, (See Miami County). Canal lands north of the town contain many interesting features.

The lock area lies on the bluffs east of Loramic Creek on mostly unkempt terrain. The region has been glaciated by both the Illinoian and Wisconsin ice sheets which left a rather thick coating of drift. The valley fill of sand and gravel from the glacial meltwater is reported to be about 80 feet in thickness. The present vegetation reflects man's influence on the ecology of the area.

Contact: The Ohio Historical Society 17th & 171 Columbus, Ohio 43211 Phone: (614) 469-4663

SIDNEY SCHOOLS LAND LABORATORY

Location: At Sidney High School on Campbell St. 13 acres

This outdoor education area is primarily a beech forest typical of western Ohio. It contains, in the association, sugar maple, red and white oak, ash and basswood. Typical spring wildflowers are present. The town lies both on the terraced flood plain and the more elevated bluffs which lie west of the Miami River on heavily glaciated land. The soils are high lime till and generally productive. Outcrops of the hasal portion of the Niagara dolomite are exposed in places. Hiking trails have been developed on the school property and visiting classes or outdoor education teachers are welcome.

Contact: E.V. Marcozzi Rt. 1, Sidney, Ohio 45365 Phone: (513) 492-2107

STARK COUNTY

BOLIVAR RESERVOIR

Location: On Deuber Rd., 4 miles NE, of Bolivar, Land 880 acres

The flood control program of the Muskingum Watershed Conservancy District called for a dry reservoir on Sandy Creek very near its junction with the Tuscarawas River. A dam was constructed and land acquired for emergency use only. Most of the land lies just south of the Wisconsin glacial boundary. Valley filling and stream modifications may be observed. The Tuscarawas River was first outlined by a pre-glacial Teays Stream, deepened during another period known as Deep Stage, then filled with outwash and its flow reversed by the Wisconsin ice sheet. At present the district lands are covered with Christmas tree plantations. A beaver dam and lodge close to the road may be seen. Facilities have not been developed. For further information, contact:

The Muskingum Watershed Conservancy District 1319 Third Street, NW. New Philadelphia, Ohio 44663 Phone: (216) 343-6647

THE BUCKEYE TRAIL

Location: Along the Ohio Erie Canal towpath in the western part of the county.

There is little variation in the pattern for the Trail in this county. It follows the old canal towpath in a relatively straight line. The canal roughly parallels the east bank of the Tus-

carawas River, One exception occurs at Massillon where the blue blazes travel on city streets for a short distance, From Massillon to Canal Fulton, the vegetation is brushy, Observation of the river valley might reveal that it contains a great amount of glacial sand and gravel deposited as a wide outwash belt in the valley of a pre-glacial river which flowed north, In places, the Massillon sandstone is exposed in bluffs along the river.

At Canal Fulton, a park with a Canal Museum and a reconstructed canal boat may be of interest.

For topographic map index and trail maps, contact:

The Buckeye Trail Association 913 Ohio Departments Building Columbus, Ohio 43215 Phone: (614) 469-3984



CAMP WANAKE

Location: On SR 93 near Beach City. 200 acres

Natural woodland, plantings of autumn olive, a 3 acre lake and a small pond provide quite an attraction for birds and other wildlife. Spring flowers and dogwood are abundant. The trees in the wooded areas are primarily oak and locust with many beautiful tulip trees and others in the association. Understory plants, including grape vines, have been left in a natural state. Two very large barns on the property have been turned into camp buildings which retain a rustic appearance. Hiking trails are advantageously developed for studying natural habitats. For further information, contact:

David Schar, Camp Wanake Rt. 1, Beach City, Ohio 44608 Phone: (216) 756-2333



CANTON PARK SYSTEM

The City of Canton maintains a number of parks with a total acreage of 682.

Monument Park has McKinley Monument, many trees, a lagoon bordered with conifers which is good for bird study, a stream, and planted flowers. The Stark County Historical Center is adjacent to the Monument, (16 acres).

Mother Gooseland Children's Park has story book play equipment and little nature study. (4 acres).

Nimisilla Park contains courts, swings, and pavilions for picnics. A wide variety of trees may be observed. (23 acres).

The largest park in the system is Stadium Park where there are many trees, flowers of all varieties planted around a Garden Center, a Japanese Garden, a fountain, and a hill-side covered with daffodils and tulips in the spring, chrysanthemums in the fall. Hiking and bicycle paths and other facilities are available. (88 acres).

For information and reservation, contact:

Director-Secretary, Canton Park System Nimisilla Park, NE., Canton, Ohio 44705 Phone: (216) 452-2731

LAKE PARK WILDLIFE AREA

Location: On Lake Park Blvd., East of Alliance, 93 acres

A 20 acre lake attracts a variety of waterfowl during migration to this area and a few wood duck nest here. The property contains woodland of two forest types, one a swamp forest with elm, ash, and soft maples predominating; the other a beech-maple association on the scattered knolls throughout the woodland. It is a good area to see common spring wildflowers. Management practices for fish, wildlife, and forestry may be observed.

Contact: Division of Wildlife District 3 Office 912 Portage Lakes Drive Akron, Ohio 44319 Phone: (216) 644-2293

MARLINGTON SCHOOL LAND LABORATORY

Location: At Marlington School. 20 acres

A marked nature trail for the identification and study of trees, shrubs, and other plants is the primary feature of this program. The woodland is in the beech-maple forest type with many others in the association, School groups may have permission to visit during April, May, September, and October.

Contact: Don Ackley 10450 Moulin Ave., NE., Alliance, Ohio 44601 Phone: (216) 821-9944

STARK WILDERNESS CENTER

Location: (In U.S. 250, 1 mile West of Wilmot. 409 acres

A great variety of habitats on this wildlife sanctuary include a near virgin forest called Signist Woods, It contains oaks 300 to 400 years old, large beeches, sugar maples and

hickories. Other wooded areas, a lake, a pond, marshes, streams, meadows, and fields in natural succession are also available for study. The area lies on an end moraine not far from the greatest advance of the Wisconsin ice sheet and is underlain with rock formations of the Pennsylvanian Series. A resistant one known as the Massillon sandstone, outcrops in the hillsides. The topography is rolling to rugged, with as much as 200 feet difference in elevation. A glacial gravel ridge and large transported boulders are evidences of glaciation. The 13 soil types reported to be found on the property are further indications of glacial action.

Six nature trails have been developed, two of which are described in selfguiding booklets. An interpretive building is the starting place for tours which are programmed for thousands of school children each year. Classes or groups may become involved in tree planting, planting shrubs of food and cover value for wildlife, and other conservation projects. For further information and arrangements, contact:

Director, The Stark Wilderness Center Box 38, Wilmot, Ohio 44689 Phone: (216) 359-5117

SUMMIT COUNTY

ADELL DURBAN PARK AND ARBORETUM

Location: 3300 Darrow Road, Stow. 36 acres

Eleven acres of undeveloped woodland have been retained as a natural area for enjoyment and study. A great variety of vegetation attracts botany classes from the local university. The terrain is hilly, a result of glaciation and erosion of the resistant Sharon conglomerate rock formation which lies beneath. Hiking trails have been developed and a green house visit may be included in a field trip.

Contact: Manager, Park and Recreation Department 3300 Darrow Road Stow, Ohio 44224 Phone: (216) 688-8206

AKRON FISH FARM

Location: On Portage Lakes Drive, 1 mile East of SR 93. 26 acres

March through June are the months recommended to observe this hatchery in operation. It produces chain pickerel, walleye and muskellunge. Fourteen ponds and a hatchery building are on the island unit. A 90 foot floating fishing pier and a levee around the island provide access for public fishing in North Reservoir. Use is extensive; a census shows a yearly count of over 10,000 people using the outer levee. Waterfowl and aquatic vegetation may be observed.

Contact: Manager, Akron Fish Farm 912 Portage Lakes Drive Akron, Ohio..44319 Phone: (216) 664-2293

AKRON METROPOLITAN PARK DISTRICT

Due in large part to the nature of the bed rock and the period of glaciation which provided a great volume of meltwater, causing stream reversal and deep valley cutting, the Akron area has scenic river gorges which have been preserved as metropolitan parks. Ten of these sites encompass-



ing 5,550 acres of land in a highly industrialized region have been developed for all to enjoy. They are described separately as each has its outstanding features. For more information, reservations, or a naturalist's services contact:

> Akron Metropolitan Park District 2077 Newton St., Akron, Ohio 44305 Phone: (216) 733-4900

Deep Lock Quarry Metropolitan Park.

Located on Riverview Rd., in Peninsula. 191 acres

This park is named for No. 28, the lock giving the highest lift of the 42 between Akron and Cleveland. It is also the site of an early Berea sandstone quarry, one of the oldest industries in the county. Millstones, grindstones and pulpstones were shipped from this point all over the world. The present woodland consists of sycamores, tulip, cherry, elm, aspen and willow growing on soil placed back after the stone was quarried. Many flowers have survived even though the soil was disturbed. This is reported to be one of the best sites for observing spring warbler migration.

Canal, Indian trails, the Cuyahoga River, old wagon roads, railroads and telegraph wires converge here to mark the site as a historical center of communication.

Firestone Metropolitan Park

Location: At Main St. and Coventry Rd., South of Akron. 250 acres

A clean Tuscarawas River near its headwaters runs through this park. Swamp land and ponds with the water table very near the surface characterize the environment. Swamp forest of elm, ash and alders, and oak forest which includes tulip and cherry growing on small hillocks are typical. The large swamp area protects man; species of plants such as white trout lily and green dragon, as well as a great variety of birds.

Furnace Run Metropolitan Park

Location: On Townsend Rd., NW. Summit County. 885 acres

The land generally extends along Furnace Run, a stream containing fossils. The wooded areas are beech-maple forest type with red and scotch pine, and many large sycamores along Furnace Run. Oswego tea, northern water snakes and warblers during migration are notable forms of wildlife present. A famous bog iron pond where bog iron (limonite) was dug to feed the furnace on Furnace Run is still discernible.

Goodyear Heights Metropolitan Park

Location: East Akron at Darrow Rd. and Newton St. 372 acres

This park is situated in the city. None the less, it has topography ranging from steep to rolling to flat land. A 15 acre lake and swamp provide aquatic plants and animals for study. Alder Pond is a relic of past glacial impoundment and has yellow birch, a northern species, growing on its northern edge. The forested hillsides are in beech-maple with tulip, cherry, sassafras, blueberry and scotch, red and white pines scattered throughout.

Gorge Metropolitan Park

Location: On Front St, between Cuyahoga Falls and Akron. 250 acres

Geologic and pioneer history make this park colorful and picturesque. Below the city of Cuyahoga Falls, the river flows through a narrow constricted gorge with many waterfalls and rapids. The descent is 200 feet in about 2 miles. The gorge was cut after the normal river channel southward was cut off by glacial fill. The rock forming the gorge is the cliffforming Sharon conglomerate in massive formation. It was deposited at the edge of the Pennsylvanian sea some 180 million years ago. Trees on the hillside are those of the beechmaple forest type which include oak, sour gum and cherry. Northern glacial relic vegetation is found in the cool, moist lower levels. The lovely trailing arbutus and other members of the heath family are found here. Local history includes the fact that the falls for which Cuyahoga Falls were named are now beneath water backed up by the Ohio Edison Company dam.

Hampton Hills Metropolitan Park

Location: On Akron-Peninsula and Bath Rds., North of Akron, 278 acres

Outstanding features in this park are deep ravines and rolling farmland with wooded areas along stream and hill-side. The woodland is in the beech-maple forest association with a good stand of walnut, as well as tulip and cherry. Wildflowers are typical of the beech-maple forest. Meandering Adam Run and a pond provide habitat for water plants and animals. An old Western Reserve home situated on "Top o the World" is being renovated by the Northampton Historial Society for use as a museum.

O'Neil Woods Metropolitan Park

Location: On Bath, Shade and Martins Rds. 240 acres

This newest addition to the Metropolitan Park District is largely undeveloped. However, new Deer Run Trail winds over former farmlands with rolling topography and finally plunges to the Yellow Creek Valley where it follows the shady banks of Yellow Creek. The trail finally returns up a long grade past a solitary white pine to its starting point in the parking lot.

Sand Run Metropolitan Park

Location: In NW. Akron, on Smith Rd. East of Sand Run, 987 acres

Sand Run was the first, and is the best known, of the Metropolitan Parks. Situated in the ancient historical center of Summit County, the Sand Run area had an important role as a melting pot or crossroads of civilization in the Cuyahoga River valley. First came the mysterious mound builders; later the Erie, Iroquois, Mohawk, Oneida, Onondaga, Cayuga, Seneca, Shawnee, Delaware, Miami, Wyandot, Chippewa, Mingo and Ottawa Indians. The high promontories along the river were used as fortifications, and the river terraces as village sites.

Portage Path and the Cuyahoga River Trail were used for centuries as avenues of transportation from Lake Erie



to the Ohio River by means of the Tuscarawas and Muskingum. Rivers.

During the war of 1812. General Wadsworth occupied a flat piece of ground in Sand Run which is known as Old Portage. He was sent there to protect the early settlers from the British and the Indians.

F. A. Seiberling Nature Center

(in Sand Run Metropolitan Park).

This addition to the Metropolitan Park District is in the process of development. It's purpose is to acquaint young and old with the natural world. In the Visitor's Center may be found live displays of reptiles, amphibians, fish, and bees. There is a Nature Name Game to help children learn to identify birds, flowers, animals and trees.

Several trails guide the visitor through the Nature Center area. On Geology Trail various types of rocks are displayed which are identified by number and key folder. Seneca and Erie Trails are nature trails. On Erie Trail during the summer various plants are labelled for easy identification.

Silver Creek Metropolitan Park

Location: On Eastern and Medina Line Rds. in Norton. 477 acres

This recently acquired land is typical hummocky glacial moraine country. There are ponds, swamp land and Silver Creek, farm fields and a small beech-maple woods. The property will be reforested and the fields returned to woodland by natural succession.

Virginia Kendall Metropolitan Park

Location: On SR 359, Boston Twp. 1,575 acres

The largest of the parks, this one has beech-maple and oak-hickory forests, deep ravines with exposures of the Sharon conglomerate, the basal formation of the Pennsylvanian series, a 12 acre lake, meadows and swamps. The Sharon forms cliffs and ledges and cool coves where glacial relic vegetation may be studied. Large hemlocks, yellow birch, blueberries, orchids, wintergreen, Canada mayflower and trailing arbutus are some of the plant species in this environment. Deer, fox and raccoons are present. The cliffs are frequently used for hawk observation and the hillsides are outstanding for warbler migration.

BRANDYWINE SKI AND RECREATION CENTER

Location: Sagamore Hills in North part of county. 240 acres

Reported to be a beautiful, unspoiled woodland area, this property, though close to urban development, promises to be excellent for field trips. In addition to the mixed hardwood forest, there is a large creek and deep ravines showing outcrops of Mississippian shales and sandstones. Wildflowers grow in profusion and wildlife, including an occasional deer, may be found. Extensive hiking trails make interesting access to the numerous habitats. The property runs along the bank of the old Ohio canal. A mile-long private entrance road gives visiting groups a sense of wildness and seclusion.

Contact: Manager, Brandywine Ski and Recreation Center
Box 343
Northfield, Ohio 44067
Phone: (216) 467-8197

THE BUCKEYE TRAIL

Location: East of Nimisila Reservoir: Sand Run, Portage Path, Riverview Rd.

A small segment of the Trail goes through the south part of the county along the Nimisila Reservoir, then east through Akron Metropolitan Parks. Here it follows in part historic Portage Path to Old Portage in Sand Run Metropolitan Park. Here, during the War of 1812, General Wadsworth camped with his troops. The blue blazes then go through Mingo Camp parking lot which was an Indian camp site. In Deep Lock Quarry Park, the trail follows the Towpath Trail of the Ohio Canal. The quarry was opened in early 1800's to obtain stone for barn and house foundations. The Berea sandstone quarried here built the water intake for Cleveland, breakwalls, bridges, and buildings, Deep Lock 28 was a lift of 17 feet, the highest of the 42 locks between Akron and Cleveland. The quarry industry was the first major industry in the Cuyahoga valley and profited by having the Canal adjacent to it.

The Metropolitan park areas contain a good variety of beech-maple forest type trees, wildflowers, birds, especially at Deep Lock where migrating warblers are numerous, and cliffs showing rock formations. Picnicking facilities also are available at the parks.

For further information, maps and list of topographic sheets, contact:

Director, Buckeye Trail Association 913 Ohio Dept. Bldg. 655 Front St., Columbus, Ohio 43215 Phone: (614) 469-3984

CAMP JULIA CROWELL

Location: On SR 303 and Oviatt Rd., Richfield. 235 acres

This campsite was developed on rugged terrain, the topography a result of glaciation and stream erosion. It has two lakes and a stream, ravines showing outcrops of the shales and sandstones of two periods of geologic time, the Mississippian and Pennsylvanian. The basal Sharon conglomerate is seen in some places. Wooded areas have a mixed oak forest type with many species present. Wildflowers may be observed seasonally and birds and small mammals are abundant. Hiking trails lead to the choice field trip areas.

Contact: Camping Director, Lake Eric Girl Scout Council 1001 Huron Rd., Cleveland, Ohio 44115 Phone: (216) 659-6383

CAMP MARGARET BATES

Location: On SR 631 West of Macedonia. 125 acres

A variety of habitats may be examined on this thickly coated glaciated upland property. A lake, a stream, open field in natural succession and segments of woodland provide the ecologic environment for vegetation and animals. The camp is best adapted to day outings or field trips on week days during spring and fall months.

Contact: Camping Director Lake Erie Girl Scout Council 1001 Huron Road Cleveland, Ohio 44115 Phone: (216) 467-7376



CYO CAMP CHRISTOPHER

Location: In Bath township, NW. of Akron. 160 acres

This camp, with its outstanding natural features, is reported to be ideal for outdoor education experiences. It lies in the Cuyahoga River watershed on glaciated land which has been deeply eroded by a number of streams. Cliffs and ledges of Mississippian or Pennsylvanian age rock formations make an interesting geology story. Overhangs and a natural bridge resulting from erosional differences of a resistant layer of sandstone are picturesque. Sections are heavily wooded in the mixed oak forest type with many species of trees included. Wildflowers abound in the spring. Four ponds provide study areas for aquatic plants and animals.

A winterized lodge may be reserved during spring and fall months.

Contact: Manager, Camp Christopher 138 Fir Hill Akron, Ohio 44304 Phone: (216) 762-9174

NIMISILA RESERVOIR

Location: Off SR 619 or 93, South of Akron, 1,225 acres

This large reservoir gives access to the study of a wide variety of trees and wildflowers, waterfowl, shorebirds and many other aquatic plants and animals. The wooded areas are primarily in the mixed oak forest group and give shelter to hawks, raccoons, and other species of wildlife.

> Contact: Division of Wildlife. Public Works Jurisdiction 912 Portage Lakes Dr.. Akron, Ohio 44319 Phone: (216) 644-2293

PORTAGE LAKES STATE PARK

Location: On SR 93 and 619. 2.438 acres

A group of artificial lakes comprising over 2,000 acres was created as the summit reservoirs for the Ohio-Erie Canal. The area is glaciated, lying in the wide kame and outwash belt deposited within and at the edge of the wasting glacier. The terrain is gently rolling and sections are covered with beech-maple forests. The water and marsh areas give food and protection to numerous kinds of water fowl as well as other plants and animals. Field trips are recommended for the months of April through October.

Contact: Manager, Portage Lakes State Park 5031 Manchester Rd., Akron, Ohio 44319 Phone: (216) 644-2220

REVERE SCHOOL LAND LABORATORY

Location: On Everett Rd., Bath. 6 acres

Hiking trails have been established through the woodland and along a stream adjacent to the school. The stream is polluted but during rains there are frogs, turtles, and snakes present, Wildflowers, small mammals, and birds may be found among the mixed oak forest type trees which provide a good variety for study. Visits are encouraged, but not picnicking.

> Contact: Assistant Superintendent Revere Local School District 3496 Everett Rd. Bath, Ohio 44210 Phone: (216) 659-6111 (Richfield) 535-2154 (Akron)



TAMSIN PARK

Location: On SR 8 at 532. 100 acres

Tall trees in a hardwood forest and two small lakes at this campground provide a good physical environment for studying water and woodland wildlife. Of interest to many school groups is a museum depicting the culture of living American Indians. A guide and lecture suited to any age level is available free of charge during spring and fall months.

Contact: Manager, Tamsin, Inc. Rt. 1 Peninsula, Ohio 44264 Phone: (216) 653-6316





TWINSBURG LAND LABORATORY

Location: Wilcox School. 17 acres

A trail along Tinker's Creek winds through wooded thickets, a swampy area and across a small stream. Since the terrain is varied, it lends itself to a great variety of plant and animal life. Tinker's Creek is in a deeply entrenced valley with a thick deposit of sand and gravel. The underlying rocks are Mississippian sandstones and shales. A winter walk along the trails tells the geologic story as well as revealing evidence of deer, raccoon, opossum, squirrel, chipmunk, and mice. Winter as well as migrating birds find food and shelter in the valley. For a class field trip, contact:

Principal, Wilcox School 9198 Darron Rd., Twinsburg, Ohio 44087 Phone: (216) 425-7116

TRUMBULL COUNTY

ANDERSON PARK

Location: On Palmyra Rd., Warren. 10 acres

The city park has limited nature study possibilities. However, trees of the oak-hickory forest type are scattered throughout most of the area. The region has been glaciated; it is underlain by the shales and shaly sandstones of Mississippian age recognized as the beginning of the Allegheny Plateau province. The soil is normally acid, a fact which is reflected in the vegetation of the region. The proximity to the Mahoning River whose valley indicates a glacial meltwater drainage system adds to the study possibilities. The fill in the valley indicates that Warren lies near the headwaters of an old Teays Stage (pre-glacial) stream. An observation of these and other natural features could serve as a challenge for a field trip.

Contact: Trumbull County Metropolitan Park Board P.O. Box 106, Warren, Ohio 44401 Phone: (216) 399-2727

CAMP SUGARBUSH

Location: On SR 5 at Kinsman, 190 acres

This Girl Scout camp is situated on the glaciated, rolling Allegheny Plateau along Pymatuning Creek. The area lies on Ohio shale, a formation of Devonian age. The Berea sandstone is reported to be present in a thin formation in the hilltops. The camp contains wooded areas which include sugar maple, beech, the oaks, and hickory. The fields in natural succession and the creek provide, with the woodlands, the three major habitats for plants and animals. Hiking trails lead through the woods and along the stream. A winterized lodge may prove helpful for school field trips or camping during spring and fall months,

Contact: Camping Director Lake to River Girl Scout Council 55 South Main Street, Niles, Ohio 44446 Phone: (216) 652-5877

GRAND RIVER WILDLIFE AREA

Location: At junction of SR 88 and 534. 5,187 acres

The wildlife area lies on the floor of the Grand River flood plain. The land is predominately flat, with scattered knolls, Soils are acid and poorly drained. Timbered areas are composed of swamp forest type species with elm, ash, soft maples, pin, and swamp white oak. The southern portion of this large acreage contains some beech-maple woodland and others in the association. This is an excellent area for observing spring wildflowers. There are five impoundments, several streams and the Grand River to attract a variety of water fowl in the spring and fall. Mallards and wood duck commonly nest here. Beaver are active and a beaver dam with a large lodge is found at the north end of the property. Grouse, woodcocks, squirrel, deer, pheasant, and furbearers are seen frequently. This area is unusually good for ecological studies.

Contact: Manager, Grand River Wildlife Area Rt. 1, West Farmington, Ohio 44491

Phone: (216) 849-2175

MOSQUITO STATE PARK AND MOSQUITO CREEK RESERVOIR WILDLIFE AREA

Location: At SR 46 and 305, North of Warren. 11,857 acres

Mosquito Creek, draining a large area of the glaciated, rolling to flat, Allegheny Plateau, has been impounded to form a lake covering 7,850 acres. The park extends along the south end of the lake where vegetation of the beech-maple forest type is present but the site is not heavily wooded. A swamp area and old fields in succession are possible study areas.

The wildlife area extends all around the lake. The adjacent land is flat with acid soils which are poorly drained, a result of the glacial drift being high in clay content. A large variety of waterfowl frequent the area in spring and fall. A goose management program was started in 1957; geese now nest here and produce hundreds of goslings. Wood duck and mallards nest here also. This is an excellent location to study shore birds during the fall when the water level is low and exposes vast mud flats. Eagles and osprey are seen occasionally, and African cattle egret and glossy ibis have been observed. The management practices for fish, wildlife, soil, and water make an interesting study.

Contact: Manager, Mosquito State Park Rt. 3 Cortland, Ohio 44410 Phone: (216) 637-2856 Or: Manager, Mosquito Creek Reservoir Wildlife Area Rt. 1

Lockwood, Ohio 44435

WARREN SCHOOLS LAND LABORATORY

Location: At junction of Co. Rds., 159 and 196, 78 acres

This property is situated along a small stream and contains swamp land and a farm pond which are excellent for aquatic wildlife study. It contains school gardens, a greenhouse, an orchard, grassland, brushland and plantings of Scotch pine. In addition, a mixed hardwood deciduous woodland may be explored. Conservation features of drainage by tile, sod



TRUMBULL-TUSCARAWAS

waterway and irrigation may be observed. Visits by classes planning to hike the trails or observe the program are limited to Tuesday and Wednesday afternoons.

> Contact: Director of Vocational Education 261 Monroe St. NW. Warren, Ohio 44483

Phone: (216) 637-3153

TUSCARAWAS COUNTY

BEACH CITY RESERVOIR

Location: On U.S. 250, 3 miles NW. of Strasburg. Water-420 acres; Land-930 acres.

The dam creating this reservoir was built on Walnut Creek, a tributary of Sugar Creek which joins the Tuscarawas River. Most of the impounded water and land lies just beyond the boundary of glaciation. The glacier was responsible for many changes in drainage and filled the valleys with much outwash sand, silt, and gravel. The underlying rock formations are in the Pennsylvanian Series which includes the Upper Mercer limestone and black flint with the Massillon sandstone, forming the walls. Trailing arbutus, laurel and pine cherry are reported to be associated with outcrops of the Massillon formation in the area.

The lake supports many species of waterfowl and the marsh areas on the edges are rich in aquatic organisms. The cool moist environment of narrow ravines and north slopes have encouraged the persistence of hemlock, northern birch, and maple. The beech-sugar maple forest type is found in the association.

Facilities are limited to those at the roadside park.

Contact: Muskingum Watershed Conservancy District 1319 Third St., New Philadelphia, Ohio 44663

Phone: (216) 343-6647

THE BUCKEYE TRAIL

Location: From N Co. Line at Bolivar to E Co. Line at Sherrodsville, Approximately 20 miles

The trail of the blue blazes follows the Ohio Canal towpath along the Tuscarawas River past Bolivar "dry" dam, four canal locks, historic Zoar and Ft. Laurens. This area has typical lowland ecology; soft maples, elm, wetland wildflowers, and glacial stream features. The next six miles follows an abandoned grade of the Wheeling-Lake Erie Railroad (private property), through the wide valley of Conolton Creek. Second growth lowland species of trees are evident as well as some remaining virgin oak, sugar maple and hickory. Ohio woodland bird species are present, encouraged by feeders placed along the trail.

The last eight miles the trail ascends and descends valley hillsides, passing Atwood Lake and goes to Leesville Lake on county and township roads. Rolling farmland, upland woodlots and conifer plantations are the typical environments in view.

Camping and picnicking facilities are available at Atwood and Leesville Dams,

For maps, topo sheets and further information.

Contact: Buckeye Trail Association 913 Ohio Department Building Columbus, Ohio 43215 Phone: (614) 469-3984

CAMP ZIMMERMAN

Location: On Co. Rd. 1834 miles South of Gnadenhutten. 300 acres

Placed on the rolling hills near the broad valley of the Tuscarawas River this site has an interesting combination of features comprising its physical environment. The wooded hillsides and ravines are in the oak-hickory forest group, typical of the unglaciated areas of Ohio where residual, thio, acid soils predominate. The area contains a strip mined section; the rock wall, lake, reforestation, and soil problems providing good study possibilities. The rock formations are in the Pennsylvanian age series, the Middle Kittaniag coal lying near the tops of the hills. An oil well is present also.

The camp has accommodations for 50 persons in unheated buildings.

Contact: Ernest Murphy, Manager Camp Zimmerman 126 Spring St., Gnadenhutten, Ohio 44629 Phone: (614) 254-9271

DEVIL'S DEN PARK

Location: Off Co. Rd. 10, South of Gnadenhutten. on Co. Rd. 13, 275 acres

A site of tremendous scenic quality due to its geologic history, this park is rich in vegetation and wildlife also. The land lies on the highly dissected Allegheny Plateau in an unglaciated part of Ohio. The soils are residual and acid which is reflected in the oak-hickory forest type which typically contains walnut, maple, sassafras and many other species of trees. Many wildflowers are present and the place is reputed to have 32 varieties of ferns. Many of these are associated with the rock formations and the large gorge found on the property. Resistant sandstones form overhangs and the head of the ravine boasts a natural sandstone bridge where water flows through and plunges to a depth of 60 feet. A four acre spring fed lake is the source of the water which cascades over the rocks. The area is rich in legend of Indians and pioneers which may be read in Zane Grey's The Spirit of the Border.

The campgrounds are open from May to October. Field trips might be arranged for other times.

Rt. 2, Tippecanoe, Ohio 44699 Phone: (614) 498-7254

DOVER RESERVOIR

Location: On SR 800, 5 miles North of Dover. Land -490 acres

Dover Dam, constructed on the Tuscarawas River, is an "almost dry" dam. The water conservation pool is small, covering an area of 350 acres. The stilling basin is founded on a four foot layer of hard limestone overlaying shales. This is the Lower Mercer of the Pottsville formation, Pennsylvanian in age, The area is unglaciated but the river was subject to stream reversal by glacial blocking and the old valley deeply filled by outwash silt, sand, and gravel. The area around the pool is mostly wooded in mixed hardwoods of the oak-hickory forest type with elm-ash swamp forest in the lower parts.

Contact: Muskingum Watershed Conservancy District 1319 Third Street, NW. New Philadelphia, Ohio 44663



FORT LAURENS STATE MEMORIAL

Location: On SR 212, 1/4 mile South of Bolivar, 81 acres

The site of Fort Laurens, situated on the west bank of the Tuscarawas River, is a reminder of the storied battlegrounds of the Revolutionary War. This one tells of starving men, hostile Indians and a hard winter at a frontier post established as one of several bases to reach the British controlled area on the north. The old fort now has the abandoned Ohio Canal running through the property. Part of the area remains wooded in the oak-hickory forest type with wildflower growth beneath the canopy. The area is unglaciated but only two miles beyond the Wisconsin glacial boundary. The river shows valley fill of outwash sand and gravel and modifications in flow due to the ice sheet.

For more historic information

Contact: Ohio Historical Society 17th & I71 Columbus, Ohio 43210 Phone: (614) 469-4663

SCHOENBRUNN VILLAGE STATE MEMORIAL

Location: On U.S. 250 just South of New Philadelphia. 171 acres

This is a reconstructed Moravian Indian settlement originally established in 1772. It is significant as a memorial to the efforts of Moravian Church missionaries who gave to the Indians the basic tenets of the Christian faith, education, and hygiene without attempting to "westernize" their Indian charges. Although the settlement was abandoned in 1777 due to the hostility of both Indians and white, their persistent efforts brought enlightenment to a number of Indians. Their diaries contained valuable descriptions of the virgin country and Indian tribes which inhabited it on the eve of American settlement. A church, schoolhouse, and 14 other structures. a museum and a trading post may be examined. Approximately half of the area is wooded with the original mixed oak-hickory forest type retained in its natural condition. An illustrated booklet, Schoenbrunn and the Moravian Missions in Ohio may be obtained at the site or from the address below.

The area is open April through October.

Contact: The Ohio Historical Society 17th & I71 · Columbus, Ohio 43211

SNYDER CONSERVATION FARM

Location: On SR 258, 7 miles South of Newcomerstown. 367 acres

Working with the Soil Conservation Service, the owner of this farm has introduced many conservation practices into his operation. Contour strip cropping on the rolling, unglaciated land is highly advantageous to curb erosion. In addition, emphasis is placed on increased fertility of the soils and reforestation. Woodland acreage of 150 acres includes the old woods which is white and red oak primarily, and the planting of white pine, tulip, white oak, Norway spruce and walnut. Wildflowers, birds and small mammals including deer are found here. Three springs have been developed and many acres returned from natural succession to farm-

land and pasture. For a vocational agriculture tour the owner suggests guide service should be supplied by the teacher. For permission contact:

Robert P. Snyder Rt. 1. Newcomerstown, Ohio 43832 Phone: (216) 498-8907

WATKINS FARM

Location: On SR 93, NE. of Dundee. 50 acres

The owners of this property are willing to permit classes to observe the various conservation programs practiced tere. A farm pend for aquatic life, multiflora rose, "a living fence" for bird cover and food, tree planting and contour strip farming are the contributions to wildlife habitat development and erosion control. The farm lies on the Beach City Reservoir area just beyond the boundary of glaciation. The upper Mercer limestone and black flint of the Pottsville formation as well as the resistant Massillon sandstone, all of Pennsylvanian age, are exposed in the area. The original vegetation of mixed oak forest type may be observed.

Contact: L.W. Watkins 55 Willowdale Lake Ave. North Canton, Ohio 44720 Phone: (216) 499-6980

ZOAR LAKE WILDLIFE AREA

Location: Off SR 212 at Zoar. 43 acres

This small area around a 15 acre lake is of interest historically. It was called Lime Kiln Lake because of an old lime kiln that once existed in the lake bed. The expected lime source was the Lower Mercer limestone of the Pottsville formation, Pennsylvanian in age, which outcrops not far above stream level. The lake attracts a few species of waterfowl during migration. Rabbit, quail and furbearers are common. Fish management practices may be observed here.

Contact: Division of Wildlife District 3 Office 912 Portage Lakes Drive Akron, Ohio 44319 Phone: (216) 644-2293

UNION COUNTY

CAMP RADAWOOD

Location: Off U.S. 33, 1/2 mile North of Marysville. 15 acres

This small camp boasts a little lake and a wooded area. The trees are in the beech-maple forest type with many others in the association. The topography is rolling due to the glacial till deposits of the Powell moraine. Hiking trails have been developed giving access to good study areas.

Contact: Camping Manager Central Ohio Council, Boy Scouts of America 1428 E. Broad St. Columbus, Ohio 43215 Phone: (614) 253-5513



UNION-VANWERT-VINTON

HALL PARK

Location: 6-1/2 miles NW, of Richwood. 7 acres

This park contains a small wooded area with several species of mixed hardwood trees. Among these are sugar-maple, oaks, and hickory. A little pond has been stocked with fish, other aquatic life occurring naturally. Some wildflowers, birds, and small mammals may be observed. The area lies in the glaciated Central Lowland till plains typical of western Ohio. The soils are high in lime content but poorly drained. The rocks lying beneath the thick deposits of glacial drift are dolomites of Silurian age. An ecological study of the area could be quite significant.

Contact: Marvin Hall Rt. 1, Richwood, Ohio 43344 Phone: (614) 943-2742

RICHWOOD LAKE PARK

Location: At Richwood. 25 acres

An artificial lake made by impounding a small creek which is a tributary of the Scioto River provides the focal point for this little park. The land is gently rolling to flat, a part of the great glacial till plain characteristic of western Ohio. Trees are mixed hardwoods with some ash, elm, and cottonwood, typical of low-lying areas. The park is primarily for recreation but provides environmental studies proportionate to a teachers ingenuity.

Contact: Manager, Richwood Park 101 S. Franklin St., Richwood, Ohio 43344 Phone: (614) 943-2422

VAN WERT COUNTY

HIESTAND WOODS PARK

Located Off SR 127 on South side of Van Wert. 20 acres

This choice little park situated beside a golf course and a city reservoir is an oasis for nature study. Large oaks and honey locust trees predominate in the developed picnic area. Pileated woodpeckers as well as many other birds may be seen. An undeveloped area has hiking trails through the woodland along a stream. Recommended use is from May through September.

Contact: Van Wert Jaycees P.O. Box 21 Van Wert, Ohio 45891

JUBILEE PARK

Location: East of Washington St. (SR 127 North) on Brook St. 6 acres

Ingenious indeed is the ecologist who can help classes interpret the natural history of this city park. Though definitely a recreation area, a few trees of the beech association remain; an old reservoir, glacial soil, flat topography, houses on one side and broad fields beyond tell the story of man's use of the land, Lush beech forests, on rich glacial till plains

were adjacent to the Great Swamp area where grew equally abundantly the typical ash-elm swamp association of trees. Now an extension of the Corn Belt the adjacent fields are a part of a rich agriculture area.

> Contact: Division of Parks City Hall, Van Werth, Ohio 45891 Phone: 238-1237

VINTON COUNTY

THE BUCKEYE TRAIL

Location: From Tar Hollow State Park through the NW. part of county to the Hocking Co. line near Ash Cave,

This small segment of the trail extends across the northwest corner of the county. It travels along the rugged hills and valleys made by normal stream dissection and the glacial stream reversal of Salt Creek. The sandstones and shales of Mississippian age are exposed in the valleys and ravines. It passes through three forest types, the bottomland hardwoods of the old Teays preglacial valley, the mixed mesophytic and the oak-hickory association.

For maps and further information, contact:

The Buckeye Trail Association 913 Ohio Dept. Bldg. 65 S. Front St., Columbus, Ohio 43215 Phone: (614) 469-3984

LAKE ALMA STATE PARK

Location: On SR 349, 1 mile North of Wellston.

A dam on Little Raccoon Creek created Lake Alma which covers approximately 60 acres. The land surrounding the lake is heavily wooded with oak-hickory forest making a good study area of woodland and water habitat. It provides secluded campsites also. The rolling hills are underlain by the Pottsville formation of limestone, coal and shales, Pennsylvanian in age. Soils are variable but typically thin and acid. Good studies of rock, soil, topography and vegetation relationships are possible.

Contact: Manager, Lake Alma State Park Box 42, Wellston, Ohio 45692 Phone: (614) 384-4474

LAKE HOPE STATE PARK AND ZALESKI STATE FOREST

Location: On SR 278, NE. of McArthur. Park = 3,902 acres: Forest = 18,650 acres

Rich in history, wildlife and vegetation as well as being scenic and removed from highly concentrated populations. Zaleski Forest and Lake Hope are excellent for field trips and recreation.

Land acquisition of this rugged, wooded terrain began in 1926, the park started in the early 1930's. The forest was named for Peter Zaleski, a French banker, who initiated the smelting of iron in the area. Only the Old Hope Furnace remains today to tell the story of his exploits. The forest is primarily oak-hickory forest type with tulip growing on well-drained fairly open places. In addition, there are large plantations of pines. The animal population of birds, deer, and other small mammals is high, Wild turkey was restab-



lished quite successfully in recent years. Wildflowers on the forest floor are abundant. Waterloo Forest in Athens County was made a part of this property in 1969. Raccoon Creek and its small tributaries are responsible for the highly dissected terrain, underlain with the coals, sandstones, shales, and limestones of Pennsylvanian age, The fire tower on Atkinson Ridge may be used to observe the topography as well as to understand its use in forest production.

Lake Hope State Park, though one of the older ones in the state, remains a favorite. It contains the old Hope Furnace and the forest with wildlife and wildflowers extensively present in Zaleski Forest. A large lake contributes to its scenic value and affords a good body of water for studying acid mine water drainage problems. The park contains a beautiful rustic lodge built from the sandstone and timber the area, winterized sleeping cabins, a dormitory and house-keeping cabins. A nature center and program are operated during the summer months.

For reservations and further information, contact:

Manager, Lake Hope State Park, Zaleski, Ohio 45698 Phone: (614) 596-4300 Or Forest Ranger, Zaleski State Forest, Zaleski, Ohio 45968 Phone: (614) 596-5781

COMMUNITY CAMP

Location: On SR 328, 3 miles South of New Plymouth. 1,200 acres

As a weekend retreat and a summer haven for many city children and young people this large acreage provides the basis for exciting experiences. The geologic story is told in the mature streams and in rounded hills, with sandstone rocks of Pennsylvanian age exposed in places to form ledges and overhangs. Springs seep out below shale levels where water cannot penetrate; fossils are found, ceramic clay is available, and evidences of strip mining for coal are still visible. Eroded ravines and rich flood plains, creeks, one of which is impounded to form a small lake and marsh area, are other physical environment features. The many wooded acres of mixed hardwoods shelter flowers, birds and small animals. Known pioneer history goes back to 1703. An Indian dumping ground with broken tools and evidences of the Morgan Raiders Trail are additional attractions. An old farmstead, barn, and campsites constitute the living arrangements.

> Contact: Director, Community Camp 137 E. State St., Columbus, Ohio 43215 Phone: (614) 228-5696

VINTON COUNTY EPISCOPAL CAMP

Location: On SR 160, near Hamden, 500 acres

This camp and retreat is situated in rolling hill country covered with trees. These are in the oak-hickory forest type with many other trees and species of wildflowers present. Several old strip mines provide a good study of natural succession after severe disturbance. Rock exposures show typical Pennsylvanian age formations of limestone, sandstone, shale, and the Lower Mercer or No. 3 coal which was mined in this region, Wildlife with evidence of deer, grouse, rabbits, raccoon, and birds may be observed. A man-made

lake, stocked with bass, gills, and catfish, could be studied for other animal and plant organisms. Hiking trails have been developed and areas are available for field trip lunch stops.

> Contact: The Rev. Albert H. MacKenzie Director-Vinton Cty. Episcopal Camp 541 Second Avenue, Gallipolis, Ohio 45631 Phone: (614) 446-2483

VINTON FURNACE EXPERIMENTAL FOREST

Location: Off SR 93, 3-1/2 miles East of Dundas, 1,200 acres

The Mead Corporation in cooperation with the U.S. Forest Service has been conducting research on this area since 1952. All the timber on the large tract was originally cleared for making charcoal. The charcoal then was used to smelt iron ore. Some of the best iron in the world flowed from Ohio furnaces until a richer source was discovered in Michigan and Minnesota. The thousands of acres of clear-cut land now have timber approaching 100 years. The present research program is designed to provide answers as to the best methods of cutting, seeding and selection of species on the varied soils and topography of southern Ohio. A field trip to observe and study the results of the research by groups or classes at the high school or college level may be arranged.

Contact: Herbert L. Morgan The Mead Corporation, Chillicothe, Ohio 45601 Phone: (614) 772-3422

WILDCAT HOLLOW

Location: Off SR 124, 5 miles West of Wilksville, 750 acres

This extensive private campground property is reported to be as rugged as its name. It is situated in the rolling, wooded hills along Raccoon Creek. A sandstone rock overhang is called "Wildcat Cave" and is a good example of the rugged erosion pattern in the ravines. The area is heavily wooded in the oak-hickory-tulip forest association with many shrubs and wildflowers present. A small lake, an old family cemetery, five miles of hiking trails where beaver dams and other evidences of wildlife may be observed and hilltop panoramic views enhance the area for study or recreation.

Contact: James Palsgrove 6687 Heron Ct., Orient, Ohio 43146 Phone: (614) 877-3200

WARREN COUNTY

BART'S WILDLIFE RECREATION AREA

Location: On Spring Valley Lake adjacent to Spring Valley Wildlife area.

19 acres

This site with its campground and picnic facilities is listed for convenience in visiting or studying the state wildlife area. Waterfowl, shore birds and song birds may be observed from the site.

Contact: Bart's Wildlife Recreation Camp Ground Spring Valley Lake, Rt. 1 Waynesville, Ohio 45068



WARREN

CAMP GRAHAM

Location: Off SR 350 on Clarksville Rd. 1/4 mile North of Clarksville.
70 acres

This 4-H camp is situated on Todd Fork, a tributary of the Little Miami River. It lies just west of the edge of Wisconsin glacial deposits in the Illinoian till. The property has been deeply eroded by the stream exposing Ordovician age strata with fossils. The property is mostly woodland of mixed oak type with hiking trails developed throughout. The camp has a lodge and 14 sleeping cabins which are not winterized. Day outing or field trips may be arranged

Contact: Camp Manager, 4-H Extension Office Box 217 Lebanon, Ohio 45036 Phone: (513) 932-1891

CAMP KERN

Location: On SR 350 West of Fort Ancient. 410 acres

One of several camps situated along or near the Little Miami Scenic River, this one has all the features and habitats for outdoor education. Several schools are taking advantage of these assets. The area lies within the boundary of Illinoian glaciation, covered with well weathered till. It is located in what is termed, "the Cincinnati arch or anticline", an area subjected to regional uplift which after millions of years has exposed rocks of Ordovician age, the oldest in the state. These rocks contain an abundance of fossils. A deserted farm, the property contains fields in natural succession, two ponds for aquatic plant and animal study, a good woodland of mixed oak forest type and an excellent display of wild-flowers and shrubs.

Birds and mammals are typical of the region. Fort Ancient with its museum and mounds are within hiking distance. Buildings are winterized and will accommodate 150 people in cold weather.

Contact: Manager, Camp Kern Dayton YMCA 117 W. Monument Ave. Dayton, Ohio 45402 Phone: (513) 299-8950

CAMP SWONEKY

Location: On Middleboro Rd., Exit 30 of I-71. 150 acres

Situated on the east side of the Little Miami River valley, this camp has scenic features; mature forest and ravines show outcrops or Ordovician shales and limestones. The trees are the mixed oak forest type with an understory of shrubs and wildflowers. Hiking trails have been developed. Three winterized buildings housing 60 persons are available.

Contact: Director, Camp Swoneky Salvation Army 114 East Central Parkway Cincinnati, Ohio 10452 Phone: (513) 241-8300

CAMP WY-CA-KEY

Location: On Moore-Sour Road, via of SR 123 and Gilmore Rd., SE, of Lebanon, 125 acres

Winter camping and field trips are possibilities on this property. An old farm, the camp is rich in the three major habitats; open field in natural succession, woodland of the mixed oak forest type, and a lake for the study of aquatic plants and animals. The area is located on Illinoian glacial till between two lobes of deposits by the Wisconsin or latest glacier. The Miami lobe is on the northwest and the Scioto lobe is to the northeast. The terrain is rolling to flat east of the Little Miami River valley. A winterized farmhouse, a lodge partially winterized and 5 cabins constitute the living quarters. Reservations may be made for day use or school camping.

Contact: Camp Manager, Dayton YWCA 141 W. 3rd St., Dayton, Ohio 45402 Pkone: (513) 461-5550

FORT ANCIENT STATE MEMORIAL

Location: On SR 350, 7 miles SE, of Lebanon. 696 acres

Fort Ancient State Memorial was created as an archeological preserve in 1891. Care and control of the site have been vested in the Ohio Historical Society since that date. Two prehistoric Indian cultures inhabited the Fort Ancient Earthworks and the Anderson Village site. The Hopewell Indians, living in Ohio between 300 BC and 600 AD built the Earthworks. Sometime between 1200 AD and pioneer history the Fort Ancient indians reoccupied the site. On the rising bluff 275 feet above the east bank of the Little Miami River, the Hopewell people constructed walls to make an enclosure in three parts, within which the dead were buried and ceremonies performed. A museum, opened in 1967, shows tools, pottery, ornaments and methods of burial. There is no charge for school groups.

The larger wooded area surrounding the fort is rich in habitats for plants, birds and small mammals. Small streams have eroded through the covering of Illinoian glacial till. Fossils of Ordovician age may be found in the limestones and shales exposed by the erosion of the river. The gorge here was formed by glacial stream diversion.

Contact: The Ohio Historical Society 17th & 171 Columbus, Ohio 43211

Phone: (614) 469-4663

HOB CAMP NATURE CENTER

Location: On SR 123, 1/2 mile East of I-71.

Fields in natural succession, woodland, pond and stream furnish diverse habitats for this school land laboratory. A 20 acre wooded area contains remnant beech and maple trees with a limited number of oaks. Old red cedars dot the matured pastures, a vegetation typical of calcareous soils. Wildlife food plantings and reforestation are projects executed by the Warren County Conservation Association, owner of the property. A stream intersects the area in two places exposing Ordovician limestones and shales where fossils can be collected. The plans for development are progressing slowly.

Contact: Manager, Hob Camp Nature Center 718 Southline Dr., Lebanon, Ohio 45036 Phone: (513) 932-8397



MIAMI CANOE BASE

Location: On SR 350 across from Fort Ancient. 111 acres

With 1-1/2 miles of frontage on the scenic Little Miami River this site is quite appropriately a base for starting canoe trips down stream. It has numerous other possibilities for field trips and nature study which include woodland. field and water habitats as well as the geologic and glaciation story. Eighty-six acres of woodland contain beech, maple, butternut, walnut and hickory trees on the hillsides with numerous cottonwood and sycamores near the flood plain of the river. Many wildflowers appear before the trees come into full leaf. Two lakes as well as the river furnish sites for aquatic studies, A large buzzard roost at the top of the hill is the home of as many as 1,000 of these birds in season and fox dens are in the forest. The area was glaciated during the Illinoian ice sheet invasion and is covered with typical well-weathered till. The Little Miami with its broad meandering valley is a typical meltwater stream of the Wisconsin period of glaciation. The valley profile shows cut banks, natural levees, flood plains and terraces. The eroding stream has provided good exposures of the Ordovician limestones and shales which are rich in fossils. A small trapper's cabin as well as canoes may be rented.

> Contact: Miami Canoe Base Box 159, Rt. 2 Morrow, Ohio 45152

Phone: (513) 899-2895

WASHINGTON COUNTY

CAMP HERVIDA

Location: Off SR 76, South of Waterford. 86 acres

This 4-H camp is situated in a steep and forked ravine with sandstone rock exposed along a small stream. Of the 86 acres, much is mixed hardwood forest, oak predominating, but an outstanding feature is an extensive well-grown pine plantation. Many birds and small furry animals may be seen, as well as typical wildflowers. Not so typical are walking fern in rock crevices and primitive vegetation. A lodge with fireplace, dining hall and sleeping cabins are available for spring and fall months.

> Contact: County 4-H Agent Washington County Cooperative **Extension Service** Court House Marietta, Ohio 45750

FALL RUN GIRL SCOUT CAMP

Location: On Twp. Rd. 69, SW. of Layman. 205 acres

This farm has a ravine formed by a tributary of Fall Run which creates an unusually interesting nature study area. Open fields constitute the large part of the property but the stream and woodland provide many kinds of habitats for plants and animals. A large overhang of sandstone rock is responsible for the fascinating weathering, and the plants and animals typical of a cool, moist environment. Large hemlock trees and other glacial relic vegetation are in close proximity. The Fall Run Trail, developed by Boy Scouts and interested citizens, may be picked up at the intersection of Fall Run and the ceeek which goes into the Girl Scout camp.

> Contact: Mrs. William Hartell Heart of Ohio Girl Scout Council 607 Third Street Marietta, Ohio 45750

MUSKINGUM RIVER PARKWAY STATE.PARK

Located along the Muskingum River.

Dams and locks have made park sites advantageous along the river. Typical river vegetation, flood plain, and valley profiles may be observed as well as navigation procedures, In this county, sites exist at Devola, Lowell and Beverly on State Route 60, Locks are operated only during the normal boating season.

> Contact: Manager, Muskingum River Parkway State Park Box 2806 Zanesville, Ohio 43701 Phone: (614) 452-3820

SAIDA

Location: 10 miles North of Marietta on Fearing Twp. Road 332. 375 acres

Hilly farmland consisting of woodland, permanent pasture and tillable fields has interesting possibilities for a field trip. Shallow oil and gas wells, a stream eroding Permian age sandstones and shales, numerous springs, two ponds. a variety of wildflowers, abundant animal wildlife and a broad panoramic view of the countryside may be observed. Woodland is mixed hardwoods with oak and tulip tree predominating. Small groups may arrange to tour the property on horseback if desired.

> Contact: Saida Rt. 1, Whipple, Ohio 45788 Phone: (614) 585-2372

VETO LAKE WILDLIFE AREA

Location: On SR 76, 8 miles NW. of Belpre. 448 acres

A 160 acre lake with a narrow shore line provides a variety of habitats for plants and animals. The lake supports a limited number of mallard, wood duck and teal, with heron in the swampy areas. The marginal land contains an interspersion of mixed hardwoods, oak, hickory and beech. An occasional shagbark hickory is also observed. This environment gives protection to many different kinds of birds and wildflowers. The upper portions of the lake produce excellent populations of bullfrogs, soft and hard shelled turtles.

> Contact: Division of Wildlife District 4 Office 360 E. State St. Athens, Ohio 45701 Phone: (614) 593-6933



WARREN HIGH SCHOOL LAND LABORATORY

Located at Warren High School, Vincent. 10 acres

Recognizing the value of beginning outdoor education at home, the faculty and students are developing a study area which contains white pine plantations and an arberetum with 12 different species of trees. A lake provides water for the school as well as aquatic plants and animals for study.

Contact: Manager, Land Laboratory Warren High School Vincent, Ohio 45784

WAYNE COUNTY

DAVEY TREE NURSERY

Location: On SR 539 NW. of Wooster. 160 acres

The Davey Treee Farm is the only one of its kind in the U.S. There are 169 species and varieties of deciduous shade and flowering trees representing 33 genera. All are labeled with Latin and common names making identifying characteristics easy to learn. Each season provides different stages of the growth cycle for study; bare trees for bark and winter bud, spring for flowers and seeds, summer for leaf form and fall for color changes and beauty.

A barn may be used for shelter in case of rain.

Contact: Mgr. Davey Tree Nursery Rt. 6, Wooster, Ohio 44691 Phone: (216) 264-3533

LAZY J PARK RANCH

Location: On Co. Rd. 6, 5 miles North of Wooster. 155 acres

An ordinary Ohio farm has been transformed into a horse ranch and recreation center. It lies on the glaciated, gently rolling Allegheny Plateau underlain with thick deposits of glacial till. Soils are characteristically acid. The farm has retained some hardwood forest of the beech maple association with the wildflowers and small animals usually evident. A lake has been constructed for swimming with limited aquatic plants and animals available for study.

The ranch program features riding and farm rodeo events. However, cows, pigs, goats, and lambs may be fed and watched. Hay rides may be arranged.

> Contact: Lloyd Jentes 727 Callowhill, Wooster, Ohio 44691 Phone: (216) 345-6497

MEMORIAL FOREST

Location: On Co. Rd. #22, NW. of Wooster. 124 acres

The Memorial Forest is the result of a reforestation program initiated by members of the Isaac Walton League 26 years ago on an abandoned farm. Through the efforts of these members, the land has been planted with red and white pines, the white species showing better growth than the red. Twenty acres are devoted to commercial growing and harvesting. A small spring fed stream with a constant flow runs through the property. A club house may be used for special occasions.

Contact: George McClarran, Secretary Isaac Walton Memorial Forest 132 Pearl St. Wooster, Ohio 44691

MILLBROOK MILL

Location: On SR 226, South of Wooster, 1 acre

Millbrook derives its name from the time in history when 8-water-driven mills operated along the stream. Keister's Mill, the only one remaining, was built in 1816. The harnessed water power turns the shafts that turn the wheel that runs the saw and grinds the corn meal or squeezes the apples. It has been in continuous operation since the day of construction. The mill machinery is in its original state; tools are wooden, reminiscent of a time when pride in workmanship was very important. Small well-supervised groups may obtain permission to visit the mill, the stream and surroundings.

Contact: Jim Strock 517 E. Liberty St. Wooster, Ohio 44691 Phone: (216) 262-6906

MYERS-SWINEHART FARM

Location: On Co. Rd. 154, off SR 302, 10 miles NW. of Wooster. 218 acres

This trim looking farm, lying on a glaciated, nearly level but dissected Allegheny Plateau, has a number of noteworthy features for study. One is the control of excess water which has been achieved by good conservation practices. The results of diversions, sod waterways and extensive under surface tiling may be observed. Of additional interest may be the calf pens, loafing shed, milk parlor for processing the milk from 50 Holstein cows, a woodland pasture and the general farm operation. The soil association is the clay-loam Wayne-Rittman-Wadsworth, characterized as being deep acid soil influenced by the glacial till and the underlying sandstones and shales of Mississippian age. The manager is active in Soil Conservation Work and will serve as a guide.

Contact: Carl Swinehart, Manager Rt. 1 West Salem, Ohio 44287 Phone: (216) 264-6343

THE OHIO AGRICULTURAL RESEARCH AND DEVELOPMENT CENTER

Location: On SR 76, 1 mile South of city limits. 1,953 acres

"Individuals and groups are welcome to visit the Research Center, to enjoy the aesthetic values of its buildings and grounds, and to observe research aimed at the goal of Better Living for All Ohioans." This statement is made in a brochure describing OARDC which is available upon request.

Known for 83 years as the Ohio Agriculture Experiment Station, the present name reflects more accurately the nature and scope of a program designed to benefit Ohio's 114,000 farm families. The families of thousands of workers employed in the firms engaged on Ohio's \$5 billion agribusiness pursuits potentially benefit also. Research at the Center deals with the interrelationship of production and marketing practices. After stopping at the Visitors' Center on the Campus, classes may visit outdoor and indoor laboratories dealing with notillage corn planting, floriculture in great greenhouses, pe-



rennial flower garden, lawn plots testing a variety of grass mixtures, soybeans in a growth chamber, a U.S. Weather Bureau station, greenhouse vegetables including many tomato varieties, insect studies, grape and dwarf apple orchards, SPF (specific pathogen free) pigs, dairy and beef cattle research, the use of a laser beam to facilitate field drainage, and countless other programs of research. The Secrest Arboretum (see separate description) is a part of this great complex,

Contact for information and/or arrangements.

OARDC, Wooster, Ohio 44691 Phone: (216) 264-1021



SECREST ARBORETUM

Location: On SR 76, one mile South of city limits, Wooster.
115 acres

With an emphasis on variety, naturalness, and scientific research, this arboretum, which is a part of the 2,000 acre Ohio Agricultural Research and Development Center, is outstanding in the United States. Over 1500 different species and cultivars (cultivated varieties) of trees and shrubs are artistically placed in accord with the natural environment, Of special interest to many is Walnut Hollow which has over 70 species and varieties of rhododendron and azalea plantings covering several acres on one hillside, a mixed hardwood forest on the other. Walkways are provided to enjoy both communities which include wildflowers, ferns, mosses, and songbirds. Other highlights are the twisted silver fir trees, an intriguing plant oddity; the young bristlecone pines, the same rare species which is known in Arizona as the oldest living thing; a plantation of dawn redwood (Metasequoia glyptostroboides), the "fossil plant that lives"; a large group of arborvitae, unpruned and lovely; and a flowering crab apple display of 135 different varieties. These and fine collections of yews and junipers, make the arboretum an excellent outdoor laboratory of unusual beauty and variety, Adjacent to the arboretum there is also a collection of lilacs and an old fashioned rose garden containing nearly 800 different roses. Of value from a utilitarian standpoint is a recent project for shade tree evaluation. Since 1966, 900 trees have been planted consisting of maples and linden and their cultivars, and hawthorns. The purpose of the project is to determine which trees have strong root systems, resistance to insects and diseases and require little maintenance. The predominant soil type for these and all the arboretum plants is the Wooster silt leam, derived from glacial till, moderately acid and readily permeable to its subsoil.

An unusual collection of samples of finished wood of all kinds and from all over the world is displayed in the Arborotum laboratory building.

. For further information and tour arrangements, contact:

Director, Secrest Arboretum OARDC, Wooster, Ohio 44691 Phone: (216) 264-1021

SHREVË LAKE WILDLIFE AREA

Location: 1 mile West of Shreve. 170 acres

A 57 acre lake and a beech-maple woodland are highlights of this area. The lake attracts a variety of waterfowl during spring and fall migrations. Wood duck and mallard nest here. The area lies on the glaciated, moderately to steeply rolling Allegheny Plateau. Part of the soils are well drained; some are acid and poorly drained. A large portion is woodland with oaks and hickory found in the beech-maple association. Wildflowers and animals are typical.

Contact: Division of Wildlife District 3 Office 912 Portage Lakes Drive Akron, Ohio 44319 Phone: (216) 644-2293

WAYNE COUNTY SADDLE CLUB

Location: On Co. Rd. 186, forking right off SR 302, NW. of Wooster. 50 acres

The scene of many exciting rodeos, this site is valuable for field trips for the study of environmental relationships. It lies on the edge of the broad valley of Killbuck Creek, a stream greatly influenced by the large volume of meltwater carried south as the Wisconsin glacier wasted back. A small tributary on the property has eroded into the Mississippian age sandstones and shales making rugged topography and rock formations to study. The hillside hiking and riding trails give access to the mixed oak forest association with walnut, hickory, maple and many other species present. The wildflowers and animal life are typical of the area, Evidences of the 1969 flood may be observed. Arrangements can be made to use a large enclosed pavilion.

Contact: Ruby Bishop, Manager Rt, 6 Wooster, Ohio 44691 Phone: (216) 264-3631

WEYGANDT WOODS

Location: On SR 539 just off SR 302, NW. of Wooster. 44 acres

The Weygandt farm contains two woodland plots, each significant but in different ways. The 19 acre maple woods across the road from the farm house is managed for maple



WAYNE-WILLIAMS-WOOD

syrup production in "sugar" weather during February and March. The processing building is easily accessible. The other plot comprising 25 acres is managed for timber production. It contains giant oaks and many other species of trees in the mixed oak forest type. The land lies, for the most part, on the rolling to flat glaciated upland, underlain by the sandstone formations of Mississippian age, These are exposed in the ravines on the wooded hillsides which overlook the broad Killbuck Creek valley. The rugged terrain adds interest for a field trip through this section.

Contact: O.L. Weygandt Rt. 6

> Wooster, Ohio 44691 Phone: (216) 264-5078

WILLIAMS COUNTY

BEAVER CREEK WILDGIFE AREA

Location: Off SR 15, 6 miles North of Bryan, 153 acres

Beaver Creek and the old Lake Maumee beach ridge bisect this area. The creek has a fish population which includes small mouth bass, rock bass, suckers, bullheads, black nose dace, and sculpin. Approximately 40 acres are woodland in the beech-maple forest type with typical wildflowers present. The area is in the high lime Wisconsin till soil region, with thick glacial deposits. The Fort Wayne moraine with its rolling topography lies just to the northwest, the heavy lake bed soil region of the Black Swamp just to the southeast, Deer are seen occasionally; other animals such as fox squirrel, raccoon, rabbit and quail more frequently.

Contact: Division of Wildlife District 2 Office 952 Lima Avenue Findlay, Ohio 45840 Phone: (419) 422-6757

GEORGE BIBLE PARK

Location: Off SR 15, 6 miles North of Bryan, 60 acres

This property recently acquired for open space, wildlife reserve, nature study, and recreation is under development. Twenty-five acres of woodland in the beech-maple forest type provide good study of trees, shrubs, wildflowers, and small animals of the region.

Twenty acres to include tree planting, wildlife, and nature study areas are planned. Fifteen acres include seven acres of water, pienic and parking facilities, and walking trails.

It is a fine area of the future for study of ecology and for passive recreation.

Contact: Williams County Commissioners Bryan, Ohio 43506 Phone: (419) 636-2509 or 636-2825

HICKORY VALLEY CAMP

Location: On U.S. 6, 4-1/2 miles East of Edgerton. 40 acres

A campground has been developed on the rolling hills of the Fort Wayne moraine, a "halt" zone of the wasting Wisconsin glacier. There are 30 acres of trees and brush in the beech forest type with maples, basswood and hickory in the association. This gives protection to wildlife such as deer, fox, rabbits, and squirrels, A swamp bordering the property attracts ducks, heron, and geese during migration periods. There are hiking trails for field trip convenience.

Contact: Vernon Coil Rt. 2 Box 89 Edgerton, Ohio 43517

LAKE LA-SU-AN

Location: On Co. Rd. R. 7 miles West of Pioneer, 500 acres

Beginning with an original natural lake in rolling glacial moraine country, the owner has developed an extensive wildlife sanctuary with many natural history features. In addition to the moraine, the swamps, glacial erratics, and glacial till soils are evidences of the ice invasion. A large 75 acre lake was constructed as well as two small lakes and several ponds. An extensive woodland area west of the big lake is in the beech-maple forest association with many other species, as well as typical wildflowers present. The animal population includes deer, blue heron, a variety of song birds, cliff swallows, and turkey vultures. The lakes are stocked with good fish species. Swamp and lakes contain many other plants and animals for biologic study.

A five and one-half mile gravel road provides a scenic drive around the woods and lakes. Four hiking trails have been developed giving even better access to study areas.

> Contact: Mr. Edward Brodbeck Rt. 1 Montpelier, Ohio 43543

WILLIAMS COUNTY CONSERVATION AREA

Location: Off SR 15, 5 miles North of Bryan. 74 acres

Three fishing ponds, a beech-maple woodland with pine plantations, many shrubs and wildflowers, combine to make this wildlife preserve valuable for study. Seven white-tailed deer are confined in a two acre pen and pheasants raised for November release are restricted in a smaller pen. A cabin may be reserved for use in bad weather.

Contact: R.C. Kunkle 200 Fulton Road Montpelier, Ohio 43543

WOOD COUNTY

BOWLING GREEN SCHOOL LAND LABORATORY

Location: East of High School on West Poe Road. 1.8 acres

A commendable project is underway at this land laboratory to reforest the plot with trees which are described in the original vegetation survey of the Northwest Territory. These are in the mixed oak forest group containing several species of oak, the hickories and many others. Some trees are present now and also a pond for studying aquatic life.

Contact: Ivan Stearns 530 W. Poe Rd., Bowling Green, Ohio 43402 Phone: (419) 353-5111



LAKOTA SCHOOL LAND LABORATORY

Location: Adjacent to Elementary Jr. High School at Lakota. 1/2 acre

Two small plots provide beginning experiences for the children in this school. One is a grass area surrounded by multiflora rose, autumn olive and a conifer windbreak—good habitat for birds. The second is an old wooded area containing elm, linden, oak, hickory, sumae, hawthorn, maple, and red bud. A wildflower area with approximately ten species is associated with the woodland. The area lies within the Lake Plain province with dominately dark, poorly drained soils made from clay. Remnants of the old beach ridge of Lake Maumee may be traced in places,

A man showing self guiding trails as well as two sets of slides of various trees, wildflowers, and shrubs are available for previews. Students, too, will assist upon request, pointing out less obvious features,

> Contact: Principal, Lakota High School Rt. 1, Fostoria, Ohio 44830

MARY JANE THURSTON STATE PARK

Location: On SR 65, 66 acres

Situated along the Maumee River with access to the pool above Grand Rapids dam this area has limited study possibilities. A small woodlot near the river may be observed but there is little natural vegetation. The glacial features are interesting to note, however. The park lies in "the Black Swamp" region which was "the bottom of those great lateglacial lakes, hence, both the flatness of the land and the presence of the impermeable lake clay or clay rich till composing the surface. Beneath the clay was the gently sloping surface of the early Paleozoic dolomite and limestone", (Forsyth) The entrenched Maumee River fed by meltwater from the wasting glacier now drains a great segment of northwest Ohio and Indiana. Its terraces, flood plain, natural level, cut banks, and meadering pattern are observable.

Contact: Caretaker, Mary Jane Thurston State Park Box 14, Grand Rapids, Ohio 43522

ROCK CIRCUS

Location: 1 mile North of Lemoyne, SW, of Exit 5 of the Ohio Turnpike,

200 acres

The owner of this area emphasizes one feature on the farm, a museum collection of rocks and minerals. Lectures and demonstrations are given by appointment to school groups or others with a geology interest. A campground for groups wishing to extend their field trip to quarries or other points of interest is provided.

Contact: Mary Lou Ruch-Hirzil Lemonyne, Ohio 43441 Phone: (419) 837-5309

WYANDOT COUNTY

BUD LAKE

Location: Mifflin Twp. 10 acres

A small man-made lake surrounded with an oak-hickory woodland interspersed with multiflora rose and pine plantings combine to make a very good wildlife area. Birds are plentiful; small mammals, wildflowers and shrubs are found beside and in the wooded area. It is located in the Tymochtee Creek watershed on the glaciated, rather smooth till plains,

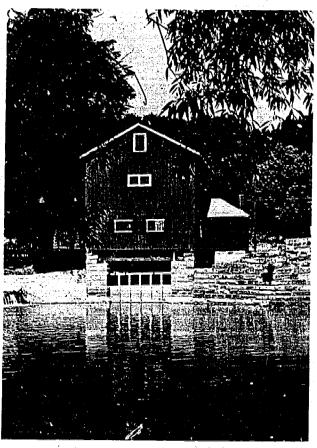
> Contact: Manager, Wyandot Co, Rod & Gun Club Rt, 1, Upper Sanduşky, Ohio 43351 Phone: (419) 294-2724

CAMP TRINITY

Location: Off SR 67, NE, of Upper Sandusky, 8 acres

This small but seenic church retreat is adjacent to the Sandusky River just one half mile northwest of Indian Mill. It lies on the glaciated till plain which is dissected by the river and small tributaries draining into it. The rocks exposed in the ravines and along the river belong to the Tymochtee formation of the Monroe dolomite group, Silurian in age. The site is wooded with trees in the oak-sugar maple forest type in a woodland which has not been grazed. Hiking trails may be used without charge. The lodge with full kitchen equipment may be rented for a nominal fee.

Contact: Robert Troup, Manager Upper Sandusky, Ohio 43351 Phone: (419) 294-2826



INDIAN MILL STATE MEMORIAL

Location: Off SR 23, 3-1/2 miles NE. of Upper Sandusky. 2 acres

"The nation's first museum of milling in an original mill structure authentically portrays the era when the state's



WYANDOT

basic economy was stabilized on the very grains that were milled." (Echoes) The Williamsburg-red structure built in 1861 stands on the banks of the Sandusky River near the location of an earlier mill erected by the U.S. government for use by the Wyandot Indians, The exhibits embrace the origin and operation of Ohio water-powered gristmills, mill-stones and buhrs, tools and techniques of the miller. The museum is open Wednesday through Sunday; school groups accompanied by adults free of charge.

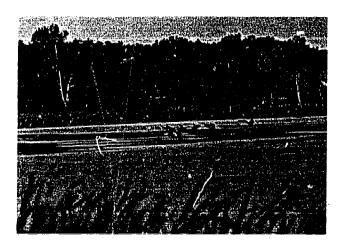
There is little natural history to be observed except the erosional and depositional features of the river and the limited vegetation.

Picnic facilities across the mill pond are maintained by the Wyandot County Historical Society. There are several types of buhrstones on monument pedestals at this site.

Contact: The Ohio Historical Society

17th & 171 Columbus, Ohio 43211

Phone: (614) 469-4663



KILLDEER PLAINS WILDLIFE AREA

Location: West of U.S. 23, and 2 miles South of Harpster, 8,100 acres

On a flat, smooth, glaciated till plain with clayey, poorly drained soils, a rich wildlife area is maintained. Twelve hundred acres are in marshes and ponds designed to accommodate the great numbers of waterfowl which nest or feed and rest here during spring and fall migration, Nesting birds are large numbers of Canada geese, mallards, bluewing teal, wood duck, and smaller numbers of other waterfowl. It is not unusual to see whistling swans during migration. Remnant prairie plants such as big blue stem grass, prairie dock, blazing star, and prairie sunflower are present. Fish, wildlife, soil, and water conservation practices may be observed. A waterfowl observation mound is helpful. Public openhouse, including wagon tour of the area, is scheduled for late September each year.

Contact: Manager, Killdeer Plains Wildlife Area Rt. 1, Harpster, Ohio 43323 Phone: (614) 469-2254

WYANDOT WILDLIFE AREA.

Location: On SR 199, 1 mile South of Carey. 341 acres

This wildlife refuge contains 160 acres of woodland in the swamp forest type. This includes elm, ash, silver and red maple, cottonwood and sycamore. Multiflora rose and cover lanes of hawthorn provide excellent food and cover for a wide variety of birds. In the southwest corner is a cattail and brush covered marsh known since pioneer days as "the Bear Wallow".

Contact: Division of Wildlife District 2 Office 952 Lima Ave. Findlay. Ohio 45840 Phone: (419) 422-6757



NATURE PRESERVES

A Nature Preserve is defined in this volume as a tract of land or water which is little changed from its condition prior to the coming of western civilization; it is a site with essentially virgin or near-virgin vegetation.* Because this is true it has scientific importance, usually in more than one discipline. To preserve an area in its natural state it has been necessary in the past and will continue to be necessary to restrict its use,

Although Ohio has had forests extending from east to west, north to south, there are relatively few stands of timber left to indicate this size and volume. Preservation of the few remaining plots is essential to understand our heritage. Ohio had rich, though somewhat scattered, prairie lands, true representatives of an early xeric environment. Remnants of this vegetation type need careful protection. The process of glaciation left many peat bogs, kettle holes, swamps, falls, and rapids in narrow rock gorges where northern plant species have persisted. Some of these must be saved because of the sheer beauty and wonderment they invoke, and because their presence in the state makes it possible for students to examine and understand the types of vegetation and why they persist in this environment.

The Ohio Chapter of Nature Conservancy was organized in 1958 with preservation of such areas its purpose. By working with local citizens' groups to buy and protect such places, and by persuading those already concerned with perservation to donate their properties, a number of sites are hopefully guarded in perpetuity. The Ohio Historical Society and the Ohio Department of Natural Resources have assumed responsibility for some valued natural areas in the past. The Department is now enabled by legislation to increase these efforts,

We are describing some of these Nature Preserves in this volume. We do so because we want Ohioans to appreciate the fact that those sites exist. We want advanced students of ecology, botany, forestry, geology, and zoology to have an opportunity to study them if such students can demonstrate that their use will not jeopardize the natural condition of the property.

We invite Ohioans to read about these precious plots of land. If, after exploring other areas within the state and national forests and wildlife areas, a particular Nature Preserve is deemed necessary for further study, a request should be made to the owner or custodian.

Restricted use will be granted if applicants can show appreciation for the value and fragility of the areas. Specific location of the property and directions have not been given with the following descriptions. This information will be provided by the owner or custodian. If the owner or custodian does not grant permission, the applicant will know that too many requests have been made and even restricted use cannot be permitted. In a few cases the preserves described in this chapter are a little less fragile and paths are established which permits use by a small, well supervised group of older students. This situation is indicated in the descriptive material.

If permission is granted, the following guide lines will be observed:

- There will be no removal of vegetation or rock specimens for any reason.
- 2. Extreme care in not trampling one plant in order to to reach another will be exercised. This means staying on paths. Experience has shown that photographers are great offenders. If photographs are necessary for study purposes, consideration for other plants is imperative.
- 3. Users will respect the confidence of location lest others not as careful will trespass and destroy.

^{*} Herrick, J. Arthur, A Natural Areas System for K.S.U. and Northeastern Ohio, Jan. 1970. This statement and the spirit of the body of statements above are credited to Dr. Herrick and the Ohio Chapter of Nature Conservancy as well as to the committee responsible for compiling the information in this book.



ADAMS COUNTY



BUZZARDROOST ROCK

152 acres

This is a nature preserve acquired by Nature Conservancy and deeded to the Cincinnati Museum of Natural History. It was established to save for future generations one of the outstanding topographic features of Ohio, a promontory of dolomite situated in a unique natural setting. It is astride the north-south boundary between calcareous rocks and soil on the west and the acid rocks and soils of the Appalachian Plateau to the east. Prairie species of plants related to climatic changes since the last continental glaciation, Appalachian species related to the non-glaciated acid soils, southern species and those typical of southern Ohio woodlands are present. The geologic history includes possible evidence of the meandering of an ancient highlevel preglacial stream and several unconformities in the rock sequence. The numerous unique features necessitate a restriction on the use of the area.

> Contact: Director, Cincinnati Museum of Natural History 1720 Gilbert Avenue Cincinnati, Ohio 45202 Phone: (513) 621-2897

SPARROWOOD NATURE PRESERVE

90 acres

This choice 90 acre retreat represents a part of Adams County which is typical of the unglaciated maturely dissected Allegheny Plateau. The thin residual acid soils are underlain with the early Mississippian group of sandstones and shales although streams in many places have exposed the older Devonian shales. These outcrops are not spectacular but frequent. This is in contrast to the Silurian age dolomites and the limestones of Ordovician age which occur as outcrops in the western and central part of the county. The private

preserve lies within the Shawnee State Forest. The typical oak-hickory forest with tulip trees on well drained soils is a good example of a cut-over forest, 20 years after cutting. The vegetation and insect life is reported to be peculiar to the Southern Appalachian region and is not found widely in Ohio. There is a wide variety of wildflowers and ferns in the association.

The use is restricted to educational groups with graduate or undergraduate college students preferred.

Contact: D.E. Sparrow 19 E. North Broadway. Columbus, Ohio 43214 OR Rt. 1, P.O. Box 297,

Blue Creek, Ohio 45616 Phone: (614) 268-5366 (513) 544-3089

ASHLAND COUNTY

CRALL WOODS

55 acres

This 55 acre forest is described as "near-virgin" with large specimens of beech, maple, tulip, red and white elm, ash, basswood, walnut, red oak, and hickory, contained within it. The land is nearly level, lying on glacial till underlain by Mississippian age sandstones and shales. The understory of herbaceous flora is rich in species. Though improvement of U.S. 224 is a threat, the property is now biologically little disturbed, the best known in the region.

Contact: William Crall R.D. #2 Greenwich, Ohio 44837 Phone: (419) 929-6225

ASHTABULA COUNTY

SAM WHARRAN NATURE RESERVE

35 acres

This tract of 35 acres is a sanctuary belonging to a nature club whose policy has permitted natural succession for almost ten years. A level ridge top, formerly an apple orchard, then steep facing slopes down to the flood plain level provide habitats for many unusual species of plant life. Beech-maple and oak-hickory forest on south facing slope has rich spring flora. North facing slope contains hemlock, striped maple, black maple and other northern species. Flood plain on one side is also rich in northern species; on the other, silver maple, ash and rich herbaceous flora are abundant. A small swamp and a three-quarter acre pond add aquatic plants and animals for study.

Contact: Howard Meahl, President 3680 Austinburg Rd. Ashtabula, Ohio 44004 Phone: (216) 998-4338



BELMONT COUNTY



DYSART WOODS

Dysart Woods is a 40 acre virgin forest where huge white oaks tower over mixed forest of beech and maple. Surrounding this plot are 455 acres of secondary growth woodland and field. The forest is a National Natural Landmark deeded to Ohio University by The Nature Conservancy. Ohio University is obligated to preserve the woods in its natural condition. The area is in the category of nature preserve in this guide, which indicates that field trips must be arranged through the caretaker or the director, both of whom are listed below. A visitation to this unique forest is a tremendous experience but requires an understanding of its value by each visitor in order to guarantee its protection.

Contact: William Bartels, Caretaker Rt. 2, Belmont, Ohio Phone (614) 686-2800

> Dr. Warren A. Wistendahl Ohio University Athens, Ohio 45701 Phone: (614) 594-3169

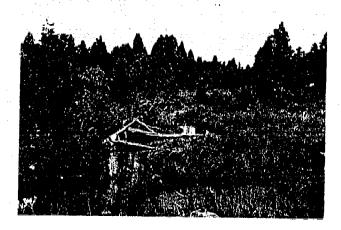
BUTLER COUNTY

SILVOOR BIOLOGICAL SANCTUARY

This is a 15 acre plot with an amazing display of wildflowers blooming in April and May. Between 50 and 70 varieties may be found. Trails are narrow making it difficult to conduct more than 25 persons at a time. Groups are invited to stop at the Zoology Museum on the Miami University campus. A visit here would include access to sanitary facilities. Conducted tours will be arranged by the owners with the aid of students of Biology and Biology Teaching Methods; limited to April and the first half on May.

Contact: Professor R.A. Feiner 915 Silvoor Lane Oxford, Ohio 45056 Phone: (513) 523-4365

CHAMPAIGN COUNTY



CEDAR BOG NATURE PRESERVE

98 acres

Cedar Bog Nature Preserve is a vegetational relic of the last ice age. Sometimes termed "a botanist's paradise" it is the only remaining natural habitat in ()hio of the arbor vitae or northern white cedar. Ferns, orchids, grass of Parnassis, gentians, poison sumac, and many other unusual plants are still growing there. A slow-flowing stream provides a habitat for small animals. Cited by the United States Department of the Interior, Parks Division, as a National Natural Landmark, its use is limited to study and research by specialized groups or individuals.

Contact: The Ohio Historical Society The Ohio Historical Center Columbus, Ohio 43211 Phone: (614) 469-4663

CRAWFORD COUNTY

TSCHANEN WOODLAND TRACT

26 acres

Advanced classes well supervised may visit this private hideout. The woodland is beech-maple climax forest which has never been pastured. Wildflowers are abundant and range from hepatica to scarlet lobelia; mammals are equally protected ranging from deer to flying squirrel. It is typical early Ohio woodland abounding in mosses, ferns, lichens, fungi, and understory shrubs. Of interest historically is a Mohawk Indian shrine landscaped with deciduous shrubs and evergreens. The retreat is a part of the approximately 1,000 acres of wood along the Sandusky River. This area also has a pond and a conifer arboretum unique in this location.

Contact: Mr. and Mrs. Charles Tschanen 439 East Lucas Street Bucyrus, Ohio 44820 Phone: (419) 563-3391

DEFIANCE COUNTY

KRILL'S LAKE

30 acres

A depression in the Fort Wayne glacial end moraine accounts for this three to four acre lake. Boggy edges have cattail and other emergent vegetation. Rich odonata fauna (damselflies and dragonflies) and snails make collecting



possible. About 20 acres of deciduous trees of the beechmaple forest association are adjacent to the lake. Visits are restricted to serious students and must be confined to dry weather.

> Contact: Cleon D. Krill Rt. I. Twinlake Farm Edgerton, Ohio 43517 Phone: (419) 298-2903

FRANKLIN COUNTY

ROCKY FORK NATURAL AREA

An unusually beautiful and exciting area for studying geology and botany, this ravine is strictly limited to use by advanced high school or college students under careful supervision. The area lies along Rocky Fork Creek, a tributary of Big Walnut Creek. A broad terrace, cut banks and flood plain may be observed on one side of the creek. A cliff on the other side shows a trail itional exposure of Bedford shale, its graditional contact with the Berea sandstone showing the three typical units: the lower with ripple marks and a concretionary sandstone layer; the middle with ripple marks, cross-bedding and a "rolled" appearance; the upper, firmly cemented and cross-bedded grading into the Sunbury shale, a carbonaceous. thin-bedded formation similar to the Ohio shale. This is a valuable site for seeing the sequence of early Mississippian rocks. The geology and hardwood forest trees may be studied anytime but for the lush carpet of spring wildflowers a visit in late April or May is advisable. Permission must be obtained well in advance. Directions will be given at that time.

> Contact: Mrs. J.A. Jeffrey Crooked Mile Road Gahanna, Ohio 43230 Phone: (614) 471-4683

SPRING HOLLOW TRAINING CENTER COLUMBUS METROPOLITAN PARK

165 acres

A section of the Sharon Woods Reservation has been set aside as an adult outdoor education center primarily for teachers and leaders of children's and youth groups. Several attractive and comfortable buildings provide a resident facility for teacher workshops and leadership training offered by the park naturalist staff. Facilities include dining room, dormitories, library, laboratory, and meeting rooms. A beautiful wooded natural area affords an opportunity to study the beech-maple and oak-hickory forest association including many wildflowers, birds, squirrels, and other small animals. The stream cutting its valley shows cut banks, oxbows, . deltaic and clay deposits, numerous glacial erratics and soil profile. Trails wind up and down the valley walls and across a swamp on an elevated pathway. Arrangements and training dates may be secured by contacting the park office.

> Columbus Metropolitan Park Board 1251 East Broad Street Columbus, Ohio 43205 Phone: (614) 258-9575

FAIRFIELD COUNTY

WAHKEENA

150 acres

The Wahkeena State Memorial is a 150 acre property bequeathed to the Ohio Historical Society as an outdoor

observation laboratory. Here botanists, zoologists, geologists, and ecologists are studying the complex relationships between the living and nonliving components of our natural environment. The area has many features which makes observations significant. An impoundment provides habitat for many kinds of aquatic plants and animals. Migrating waterfowl and shore-birds are frequently found at the pond. The major part of the property is unspoiled woodland, in that it has not been timbered for many years. Vegetation consists of large oaks and hickories with numberous other hardwoods in association. Ground plants include unusual ferns, orchids and other wildflowers typical of rich, moist, cool forests in residual sandstone soil. Found also are northern plant species such as hemlock and black spruce, plants which have persisted since the last stage of glaciation, the agent responsible for their presence. The boundaries of both the Illinoian and Wisconsin ice sheets are in close proximity to the property. This makes possible the investigation of the northern plant species which seeded in front of the glaciers, Exposures of the Black Hand sandstone formation add to the beauty and geologic value of the site. Serious students may obtain permission to cour the property all seasons but guided tours must be arranged during the summer months.

> Contact: The Ohio Historical Society Columbus, Ohio 43211 Phone: (614) 469-4663

FULTON COUNTY

GOLL WOODS

322 acres

This property is an unusually good example of what was once Ohio's Black Swamp. The term is applied to an extensive flat area approximately 20 to 30 miles in width extending northeast-southwest along the Maumee River which was the bottom of an ancestral Lake Erie. The surface of this glacial lake was over 100 feet higher than the modern lake and was caused by the dam of ice to the north blocking the normal stream flow. When the ice melted the heavy deposits of fine silt and clay made adequate natural drainage impossible, resulting in the formation of the swamp. Early farmers ditched their land which they found to be fertile, but it wasn't until 1859 when a law was passed providing public ditches that the swamp was completely drained. Goll Woods is a remnant which has very large, nearly virgin, swamp forest trees. Huge bur oak, white oak and cottonwoods may be found with many other trees in association. Wide gravel paths, 2 miles in length have been developed. For contrast, classes may compare and watch the progress of the many acres of new pine plantations. In the understory are such choice flowers as harbinger-of-spring, swamp buttercup, fawn lily, Jack-in-the-pulpit, these intermingled with spice bush and nettle. Rest rooms and parking are at the north end of the property. Goll cemetery, of value for historic and geologic weathering studies, has a parking lot. It gives access to the Tiffin River and aquatic habitat. Guide or naturalist services can be arranged and descriptive brochures may be requested for study prior to the trip.

> Contact: Ranger, Maumee State Forest Rt. 1. Swanton, Ohio 43558

Phone: (419) 822-3052



ERIE COUNTY

GALPIN WILDLIFE PRESERVE

37 acres

Willed to Milan to be preserved in the wild state as long as time shall endure this property is recognized widely as a choice natural area. Wooded ravines with many specimen of virgin trees in a hardwood forest and a rich understory of shrubs and wildflowers are a part of its attraction. The village stream, a tributary of the Huron River, gives bottomland habitat where birds and small animals are abundant. Facilities are available at Edison Park across the street.

Contact: The Milan Cemetery, Association Milan, Ohio 44846

GEAUGA COUNTY

STEBBIN'S GULCH-HOLDEN ARBORETUM

Stebbin's Gulch was acquired by the Holden Arboretum and is being maintained as a natural area. It is a deep east-west ravine in a fine natural state, rich in glacial relic vegetation. Mature hemlocks, white pine and the normal associates are present, particularly rich on the north facing slope.

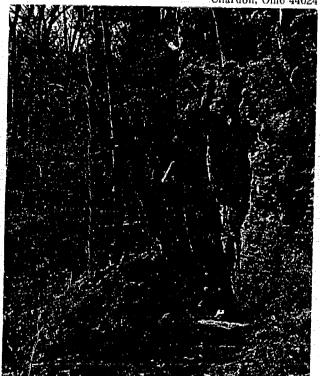
Contact: The Holden Arboretum 9400 Sperry Road, Mentor, Ohio 44060

WHITLAM MEMORIAL FOREST

100 acres

A 100 acre woodland tract with mature mixed hardwoods of good quality, this site is ideal for forest related studies. Wildflowers and undergrowth in various stages of succession are plentiful. Birds and small mammals may be observed. Hiking trails and parking are the only facilities in this area to be used for "viewing" or advanced study only.

Contact: Geauga County Commissioners County Court House Chardon, Ohio 44024



GREENE COUNTY

JOHN L. RICH NATURE PRESERVE CLIFTON GORGE

The finest part of the Little Miami River Gorge lies east of the John Bryan State Park and is a part of it. Although it now belongs to the State of Ohio the commitment to preserve it as a natural area remains. Before it reaches the gorge, the river served as an outlet for the meltwaters from a broad valley above. As it reaches the resistant Silurian age dolomite bedrock, the valley deepens rapidly, its walls steep to overhanging and the valley width little more than the width of the stream. The narrow, twisting channel has apparently been made by the enlarging and connecting of a series of potholes. These may be observed at various levels of the rock walls. These physical features create a unique environment. Northern vegetation relics persist including hemlock, yew, mountain maple, and red elderberry. Prairie plants, southern species and trees and shrubs typical of calcareous soils add diversity and contribute to the uniqueness of the area. Nature walks may be conducted upon request.

> Contact: Park Manager John Bryan State Park Rt. 1, Box 74, Yellow Springs, Ohio 45387 Phone: (513) 767-1274

GUERNSEY COUNTY

MOORE MEMORIAL WOODS

78 acres

Preservation of this wooded hillside and ridge top is a project of the Guernsey County Soil and Water Conservation Service. The area is all woodland, mostly native, of the oakhickory forest type with a small pine plantation on the east ridge. Some of the timber is very large, and reported to be virgin. The spring wildflowers are abundant. The place is inhabited with deer, grouse, squirrel, rabbits, and many species of birds.

Old Washington, an interesting town historically, is nearby. It was the site of a civil war skirmish and has confederate soldiers buried in its cemetery.

Contact: Rollin Combs, Manager Rt. 1, Senecaville, Ohio 43780 Phone: (614) 827-3420

LAKE COUNTY

KIMBALL WOODS

100 acres

"Since the days when all of Ohio was wilderness, the Kimball family has enjoyed its own woodland sanctuary and fearing what might happen to it . . . (The family) deeded 57 acres of their farm to the Nature Conservancy in 1962," writes Dr. Arthur Herrick of Kent State University regarding this tract.

Additional land was added and the whole transferred to Kent for continued protection, appreciation, and research.

The terrain of the region is rolling; it lies on thin glacial till, underlain by the shales and thin sandstones of the massive Chagrin formation. Mature beech maple forest, second growth elm swamp forest and old fields provide diverse habitats. Spring flora is especially rich.

Contact: Department of Biological Sciences Kent State University Kent, Ohio 44240 Phone: (216) 672-2260





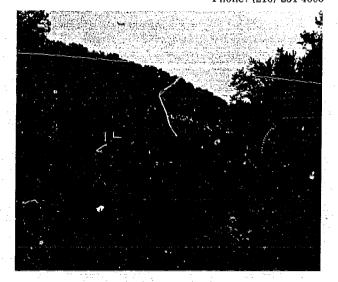
MENTOR MARSH PRESERVE

560 acres

A Department of the Interior survey reports that this property is the richest in number and variety of species of any area bordering the Great Lakes; with its five distinct natural habitats it has been designated a Natural History Landmark by that department of government.

The Mentor Marsh Committee of the Natural Science Museum of Cleveland is developing and protecting the property for use tomorrow as well as today. Geologically, the marsh is an old bed of the Grand River and parallels the lake. The swamp and swamp forest bordered by a dune community and beech-maple forest may soon be studied with the help of an interpretive center and long trails. Famous for many kinds of wildife, the area is known to provide nesting sites for prothonotary warblers and other rare species. It is recommended that visitations be arranged during the following months, the preference in descending order May, April, June, October, September. Directions and reservations obtained from:

Natural Science Museum 10600 East Boulevard Cleveland, Ohio 44106 Phone: (216) 231-4600



LICKING COUNTY

BLACK HAND GORGE

400 acres

The Licking River has cut a narrow east-west gorge about three miles long through the Black Hand formation, a sandstone of the Mississippian Age. The area abounds in Indian legend including the story of a pictographic black hand once observed at the east end of the Gorge. This was destroyed by blasting for the Ohio-Erie Canal tow path when the narrow section of the river was used as a part of the canal. The Gorge contains the excavations for an old-glass sand quarry, a tunnel for the abandoned Ohio Electric Railroad, a safe trestle of the Baltimore and Ohio Railroad which also provides a series of new rock cuts between Toboso and Hanover. The Black Hand formation, a cross-bedded, conglomeratic sandstone is well exposed and creates rugged topography. The hilltops are covered with scrub pine, oak, maple trees, and mountain laurel. The flood plain has abundant growth of equisetum, cottonwood trees and sycamore. Mixed hardwoods and a luxuriant growth of spring wildflowers are found on the wooded hillsides. Liverwort, mosses and ferns cover the rocks in many places. A well defined trail leads one from the roadways on either side and crosses the river on a broad walk beside the railroad trestle. No facilities are available but parking on the drive west of the road is permissible. Part of the area described is called canal lands and belongs to the State. The Corps of Engineers controls part by purchase and easement.

For permission to use trails on the north side of river contact:

Marie E. Hickey 126 Church Street Newark, Ohio 43055

CRANBERRY ISLAND

19 acres

This is the most noteworthy feature in the Buckeye Lake area. It is a floating sphagnum island with unique northern flora, the result of glacial bog vegetation persisting in an environment far removed from its Canadian origins. The island was formed in 1825 when a portion of the original bog broke off and floated loose to the top of the "Licking Reservoir" built as a feeder for the Ohio (and Erie) Canal. Cranberry, poison sumac, pitcher plant and other unusual plants are found. The bog-island is a nature preserve of value primarily for advanced botany and ecology students.

Contact: Chief Naturalist Division of Parks and Recreation Ohio Dept. Bldg. Columbus, Ohio 43215

DENISON UNIVERSITY BIOLOGICAL RESERVE

150 acres

This is a field laboratory of 150 acres established by Denison University to provide opportunity for teaching and research in ecology. Special emphasis is placed upon the affects of human activity upon the natural systems. A great variety of native habitats include typical deciduous forest, brush, mowed and grazed grassland, marsh, pond and wetland. Succession plots, managed timber, conferous plantations and a botanical preserve are used for class and individual



research. Junior and senior high school classes seriously interested in environmental biology are invited to visit the preserve during the school year.

Contact: Biology Dept. Denison University Granville, Ohio 43023 Phone: (614) 582-9181

SPRING VALLEY

40 acres

A group of citizens has pooled resources to guarantee preservation of a beautiful scenic valley. The area is completely wooded in the beech association with sugar maple, basswood, ash and oaks in the association. Ferns and wildflowers are abundant. The area is in glaciated territory with youthful headward erosion by the South Fork of Raccoon Creek forming a waterfall and cliffs in the Black Hand sandstone of Mississippian age. Trails have been developed and facilities are available. Trails are narrow thus use is restricted to special groups or individuals guaranteeing appreciation and respect for the property.

Contact: Edwin R. Roberts Manager, Spring Valley Company Rt. 1, Granville, Ohio 43023 Phone: (614) 582-6811

LORAIN COUNTY

CHANCE CREEK

68 acres

This property purchased by Oberlin College for a recreation area has proven to be a benefit to the Biology Department. It is located partly on the flood plain of the Vermilion River with a wooded slope on the east side, and partly on an entrenched meander valley of Chance Creek, a tributary of the Vermilion. The site is almost completely wooded except for the shale cliffs through which the streams have cut. The Chance Creek ravine contains beech and hemlock among more extensive stands of beech-maple forest. A few unusual plants are present with ferns especially abundant. The use of the site is restricted to college level students or adults.

Contact: Biology Dept., Oberlin College Oberlin, Ohio 44074 Phone: (216) 774-1221

LUCAS COUNTY BOOKER NATURE SANCTUARY

 $13.8\,\mathrm{acres}$

This area is to be maintained in its natural state with very minimal facilities. There is a small parking lot which will accommodate about five cars comfortably and one trail. During most of the year, boots are necessary due to water on the trail.

This is typical oak openings habitat with both wet sand areas and extremely dry sand dune habitat. There are some orchids, colic root, gentians, blazing star, and butterfly weed. It is intended to be a demonstration area for management of an oak openings habitat. Students who might wish to make studies and/or research in the area would be very welcome.

There is no established guide service, but this could be arranged through the Toledo Naturalists' Association who own the property.

Contact: Toledo Naturalists' Association Sanctuary Chairman 3831 Homewood Avenue Toledo, Ohio 43612 Phone: (419) 475-7012

IRWIN PRAIRIE

60 acres

This is not publicly owned land but permission has been granted to study in the area. Naturalists from Secor Metropolitan Park may be asked to lead a hike here. Members of the Toledo Naturalists' Association are available also on request.

This is one of the last vestiges of the natural wet priaire areas left in northwestern Ohio. During the spring and early summer, it is usually covered with water and is marked by a luxuriant growth of blue joint grass and slough grass with clumps of willows, cornel, buttonbush and aspens. Gentians can be found in August and September. Bitterns, rails, and swamp sparrows have nested in this area in recent years. Painted, Blanding's and spotted turtles can still be found here. It is an excellent outdoor laboratory which needs to be preserved.

Contact: Larry Lindsey, Secor Metropolitan Park 911 Madison Avenue, Toledo, Ohio 43624 Phone: (419) 248-5911

> Toledo Naturalists' Association Sanctuary Chairman 3831 Homewood Avenue

Toledo, Ohio 43612 Phone: (419) 473-7012

PERRY COUNTY FORT GLENFORD

85 acres

This suprisingly unspoiled site may be explored or studied by contacting the owner who lives at the foot of the hill. The land has been in the family for several generations. Fortunately the uniqueness of the site is appreciated. Prehistorically, it is believed that the high, flat-topped hill, its slopes heavily wooded, served as a campground and fortress for a prehistoric Indian culture. Evidence of habitation is the collapsed stone wall which surrounded the encampment and the mound of rocks on top. Even more significant, possibly, are the uncut woodland and the large and small slump blocks of the Massillon sandstone, a rock formation of Pennsylvanian age. The formation has a 20 foot outcrop at the top of the hill and was the source of the stone wall and the rugged aspect of the hillsides. At places chunks of conglomerate, sandstone with quartz pebbles cemented within it, or pieces which glisten with quartz crystals, may be observed. The large trees are oaks, beech, ash, and maple with probably chestnut relics. Mosses, ferns such as polypody, ebony spleenwort, and leathery grape are found in many places. Wildflowers typical of deciduous southeastern Ohio woodlands are abundant.

For permission and directions, contact:

Don Cooperrider Rt. 1, Glenford, Ohio 43739 Phone: (614) 659-2375

PORTAGE COUNTY

BEVERLY WOODS

42 acres

Willed to the National Audubon Society for a nature sanctuary this plot was then leased to Kent State University for study and protection. The area is glaciated, gently rolling, lying on thick glacial deposits not highly dissected. The



property contains a pond and a brook. The swamp and mixed hardwood woodland is second growth forest which has not been disturbed for 40 years. An open area is due to the presence of an electric high tension line. The rich flora includes many varieties of spring wildflowers.

Contact: Department of Biological Sciences,

Kent State University Kent, Ohio 44240 Phone: (216) 672-2266

JENNINGS WOODS

72 acres

A choice wildflower habitat has been preserved because its owner was willing to sell it for half its worth and Kent State University was willing to purchase and protect it. The area lies on the glaciated, gently rolling Allegheny Plateau, its thick glacial drift underlain by the Sharon coal and conglomerate of the Pennsylvanian series. The West Branch of the Mahoning River, a button-bush swamp, a flood plain forest, a beech-maple forest and an upland oak forest provide the environment for the rich flora observable in all seasons. An open area is present due to a gas transmission line.

Contact: Department of Biological Sciences Kent State University

Kent, Ohio 44240 Phone: (216) 672-2266

TRUMBULL COUNTY

TRUMBULL ARBORETUM

120 acres

This unusually rich area has much of interest for geologists, zool ists, and botants; perhaps even more so, for ecologists. Botanically, the site contains trees, shrubs, and wildflowers native to the region; it is a beech-sugar maple forest, near climax, with other species in the association. The major work done by the Youngstown State University students has been on ferns, which are varied and abundant. Plantations of red, Austrian, white, jack, and Scotch pine, hemlock, larch, arbor vitae, redgum, birch, and maple are present. Geologically, the property is on the glaciated, rolling Allegheny Plateau, underlain by Sharon conglomerate, the basal formation in the Pennsylvanian series of the Paleozoic Era of geologic time. Ledges of the Sharon outcrop can be found near the north boundary. Animals associated with beech-maple biome are present.

Use is restricted to serious work in these fields.

Contact: Biology, Dept., Youngstown State University Youngstown, Ohio 44503 Phone: (216) 747-1492

WAYNE COUNTY

BROWN'S LAKE BOG

80 acres

This tract of land is recognized by geologists to contain a kettle hole, a depression resulting from a large chunk of ice breaking off from a wasting glacier. It is a unique ecological area in that it shows plant zones from the small lake and acid bog to mature upland forest. Rare and unusual plants have been found in the past, plants known to be persistent glacial relics typical of northern bogs. Unfortunately, its ecology is changing. Poison sumae has encroached which causes the deterioration of other vegetation. The bog was registered as a National Natural Landmark in 1968. The College of Wooster under a long term lease from Nature Conservancy is now its custodian. A publication by John Aughanbaugh and O.D. Diller, Flora of Brown's Lake Bog, May, 1968, is available from either of the two contacts below.

Contact: Department of Biology.
The College of Wooster.
Wooster. Ohio 44691
Phone: (216) 264-1234. Ext. 379
Or: Dr. O.D. Diller, 1368 East Wayne Avenue
Wooster. Ohio 44691
Phone: (216) 264-0944

WILLIAMS COUNTY

OPDYCKE WOODS

45 acres

This private tract of land is reported to be similar to and compare favorably with Goll Woods in Fulton County. The "nearly virgin," woods has trees up to four feet in diameter. These are varieties typical of the wet-dry lake plain province, an area covered with silt, sand and clay from ancient lakes created as the glacier wasted back. Bur oak, white oak, hickory, basswood, beech, ash, elm, beech and the maples are predominate in the association. The display of wildflowers is excellent and small mammals may be seen. Permission to visit or study will be restricted to responsible persons.

Contact: Emerson Opdycke Rt. 2, Stryker, Ohio 43557 Phone: (419) 682-2108

WOOD COUNTY STEIDTMANN WILDLIFE SANCTUARY

65 acres

This property is a laboratory used by Bowling Green State University's Biology Department to obtain data on microclimates. It has a building and two towers for research purposes. The land lies on the glaciated, flat Lake Plain, with a thin covering of drift. The Silurian age Monroe dolomite is exposed in places. The site is partially wooded with the mixed oak forest type. A pond provides water habitat. Permission for use will be granted only to science oriented senior high school or adult groups or individuals.

Contact: Biology Department, Bowling Green State University Bowling Green, Ohio 43402 Phone: (419) 372-2332



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ABBREVIATIONS: NE - Natural Environment SC - School Camping C - Conservation Education U - Undeveloped COUNTY	Type of Area	Acreage	Shelter	Drinking Water	Sanitary Fac.	Pienic Tables	Parking	Hiking Trails	Guide Service	Charge	Camping
ADAMS Adams Lake State Park Brush Creek Forest Camp Woodland Altars Edwin Davis Memorial Forest Serpent Mound Shawnee State Forest Tranquility Wildlife Area	NE U SC NE NE U NE	11,694 400 80 60 57,819	•	•	•	•	•			•	•
ALLEN Camp Tokumto Deep Cut Park Fort Amanda Gun Club Lost Creek Reservoir Swiss Farm (Bluffton College) Winona Lake	NE NE NE NE NE	6 148 112 104					•			•	•
ASHLAND Camp Judson Hills Camp Wesley Charles Mills Lake Hickory Oaks Campground Hillsdale Outdoor Ed. Area Mohican State Park & Forest Pleasant Hill Lake Young's Sand & Gravel Pit	SC SC NE NE NE NE NE	260 120 3,400 123 120 5,151 2,340 300	•		•			•		•	•
ASHTABULA Beaumont Scout Reservation Buccaneer Campsites Camp Kenisee Camp Koinonia Camp Luther Camp Unalia Camp Whitewood (4-H) Geneva State Park New Lyme Wildlife Area Orwell Wildlife Area Pymatuning State Park Sycamore Lake Park	SCE NE SCC SCE NE NE NE NE NE	1,200 270 170 250 66 190 230 465 529 193 4,919	•								•
ATHENS Gifford State Forest Strouds Run State Park Trimble Wildlife Area Waterloo Wildlife Experiment Station Waterloo Forest Wayne National Forest	U NE NE NE NE U	320 2,606 2,091 447 447 128,000		•	•	•	•	•	•		
AUGLAIZE Camp St. Mary Fort Amanda State Memorial Hoge Woods Pohlman Wildlife Area St. Mary's Fish Farm	NE NE NE NE C	105 10 41 25 71	•	•	:	•		•		•	•
BELMONT Barkcamp State Park	NE	1,238		•	•	•	•				



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ABBREVIATIONS:		1		Drinking Water						1	
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SC - School Camping	\ \{\}			50	E-	200		E	- E		56
C - Conservation Education	jo		5	I Ē			Ħ	52	ι.	ಕ್ಕ	. <u>Ē</u>
U - Undeveloped	8		ĕ	l Ĕ	1 1	ř	본	Ë	1 2	L E	Ê
COUNTY	Type of Area	Acreage	Shelter	G	Sar	Pienie '	Parking	Ē	3	Charge	Сатріпд
BELMONT (Continued)	 		†	<u> </u>							
Camp Cooney	NE	58									
Camp Piedmont (4-H)	sc	40					•				
Piedmont Lake	NE	6,600									
Raven Rock	NE	600			1				· ·	ŀ	-
Union School Land Laboratory	NE	50	١.		٠		•				
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Lakewood	NE	15			.						۱ ۵
Ohio Research & Development Center	C	260] -		_				1	•
BUTLER	1			1							
Butler County Parks											
Crawford Home & Woods	NE	5									
Four Mile Creek Park	NE	22	1	•			•				
Governor Bebb Park	NE	180	İ			•	•			} !	۱ ـ
Indian Creek Park	NE	150				•	•			1	.
Miami Erie Canal Park	NE	170				•	•			1	
Pater Park	NE	200					٠				
Rentschler Forest Reserve	NE	27	Į.		• .	•	•	• 1		i	
St. Clair Recreation Area	NE	28	1		1	•	•				
Hueston Woods State Park	NE	3,596			•	•	•	•	•		
Pater State Wildlife Area	NE	192		•	•	•	•	•		Ì	
Springhill Nature Center	NE	11		•	•	•	•	•			*
CARROLL								1			
Atwood Lake	NE	4,120		•	•	•	•	•			•
Blue Bird Valley	NE	120		•	•	•	•	•		•	•
Camp Aldersgate	SC	40			•	•	•	•		•	•
Camp Falcon	SC	200	•	•	•	•	•	•		•	•
Camp Muskingum	SC	85	•	•	•	•	•	٠			•
Camp Wakonda	SC	97	٠	•	•	•	•	•		•	•
Gralee Lake	C	243	•	•	•	•	•	•		•	•
Green Hills Tree Farm	C_	180		•	•	•	6	•		•	•
High Hopes Holiday House	NE	13	, •	•	•	•	•	•	- 1	•	•
Leesville Lake	NE	3,620	•	•	•	•	•	•			٠
Pride Valley	NE	320	•	•	•		•	•	4	•	•
Rolling Y Ranch	SC	600	•	•		•	•	•			•
Twin Valley Farm	NE	365	•	•	•	•	•	•		•	•
CHAMPAIGN									İ		
Cedar Farm	C_	140		•		•	•	•			.]
Graham Local School Outdoor Educ. Center	NE	63			•		Ì	•			
Kizer Farm	C	160					•	•			_ [
Kiser Lake State Park	NE	860	•	•	•	•	•	•		_	•
Ohio Caverns	NE	100	•	•	•	•	•	ŀ	•	•	1
Siegenthaler Farm Urbana Wildlife Area	NE NE	16 549				1	:	}		l	
	INE	049		•]		•		ł	ı	
CLARK					l	J		ł		1	İ
Clark Lake Wildlife Area	NE	288		•	•	•	•	ı	L		1
George Rogers Clark Park	NE	150	•	•	•	•	•	•			ļ
Gundolf's Recreation Farm	NE	95	•	•	•	•	•	•	ŀ	•	•
North High School Land Lab	NE	92			l		•	•			
Snyder Park	NE	200	•	•	•	•	•	j	ļ]
CLERMONT					ŀ		l		.	ļ	ŀ
Camp Edgar Friedlander	NE	860			. 1	1		•	.	ı	.
search support recommends	1	277				1					



											
ABBREVIATIONS: NE - Natural Environment SC - School Camping C - Conservation Education U - Undeveloped COUNTY	Type of Area	Acreage	Shelter	Drinking Water	Sanitary Fac.	Pienic Tables	Parking	Hiking Trails	Guide Service	Charge	Camping
CLERMONT (Continued)		 			-	+	+-		+	1	+
Cincinnati Nature Center Clermont NE Land Lab Stonelick State Park	NE NE NE	· 120 543 800	•	•	•	•			r		
CLINTON Camp Kirkwood Cherrybend Pheasant Farm Cowan Lake State Park	SC C NE	250 375 1.775		•				•			
COLUMBIANA Beaver Creek State Park Beaver Creek United Presbyterian Center Beaverkettle Farm Boy Scout Camp Camp Merrydale Guilford Lake State Park Highlandtown Lake Wildlife Area Yellow Creek State Forest Zepernick Lake Wildlife Area	NE SC NE SC NE NE NE NE	2,202 120 4,000 423 17 488 2,035 .756 513	•			•	•	•		æ	•
COSHOCTON Mohawk Reservoir Mohican River Access Muskingum Valley Scout Reservation Pilgrim Hills Conference Center U.S. Hydrological Research Station Wills Creek Lake Woodbury Wildlife Area	NEEC EEC NE	3,700 370 500 200 1,000 3,690 2,000			•	•			•	•	•
CRAWFORD Amann Reservoir Cranberry Twp. Brick Arch Crawford Nursery Kaple Saw Mill	NE NE C	156 80 20 35	•					•	•.		
CUYAHOGA Cleveland Metropolitan Parks Bedford Reservation Big Creek Bradley Woods Brecksville Reservation Euclid Creek Park Huntington Reservation North Chagrin Reservation Rocky River Reservation South Chagrin Reservation Independence Land Laboratory Lake Erie Junior Nature & Science Center North Royalton Land Laboratory Shaker Heights Regional Nature Center Warrensville Heights Land Laboratory DARKE	NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN	1,335 380 751 2,500 351 105 1,719 5,395 614 35 105 4 275 16	•			•			•		
Darke County Wildlife Area Sports Haven Wayne Lakes DEFIANCE Camp Fort Defiance	NE C .C	315 92 465	-	:	•	•	•	•			
Amula * Are Detratice	SC	5	•	•	•	•	•	L	1	•	•



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ABBREVIATIONS:	1_			Drinking Water	İ .				5.5		
NE · Natural Environment	Area			. E	Sanitary Fac.	Picnic Tables		Hiking Trails	Guide Service		
SC - School Camping	4			l h	<u> </u>	ਜ਼ਿੰ		l L	i i		
C - Conservation Education	ĵo		er	Ė	l E		ı,	, 52	S	8,] <u>.</u>
U - Undeveloped	e d		Shelter	Ē	j. į	Ĭ.	Parking	kir.	Ē	E L	Ē
COUNTY	Type (Acreage	S.	٦	Sa	Ĕ	Pa	田田	ß	Charge	Camping
DEFIANCE (Continued)											
Camp Edward Drummond Libbey	NE	150									١.
Five Mile Creek Access	NE	5						ł		ŀ	
Independence Dam State Park	NE	321	i -		•		•				
Oxbow Lake Wildlife Area	NE	313		•							i
Shawnee Scout Reservation	NE	650	ļ	•	•	•	•	•	[
Tree Farm (The)	NE	78]	•	•			İ
DELAWARE		Ì				!					
Berkshire Lake	NE	81	•	•	•	• :	• 1		1		
Blue Limestone Park	NE	İ	•	•	•	•	•		1		l
Camp Greenwood Lake	NE	87	ł	•	•		•	•			•
Camp Lazarus	SC	300	• 1	•	•	•	•	•	ĺ		•
Delaware Quarry	C	30]		•		•		
Delaware State Park	NE	7.378	1	•	•	•	•	•			•
Delaware Widlife Area	NE	7,600	1	•	•	•	•			ļ	
Olentangy Caverns	NE	91	•	•	•	•	•	•	•	•	•
ERIE				ŀ							
Blue Hole	NE	10			•	•	٠			•	
Camp Timberlane	SC	284	•	•	•	•	•	•		•	•
Erie County 4-H Camp	SC	21	•	•	•	•	•	•			•
Inscription Rock & Glacial Grooves Kelleys Island State Park	NE NE	1		١.		_	•				
Milan Wildlife Area	NE	590 296		•	•	•					
Resthaven Wildlife Area	NE	2,210		٠.	l . J		:		ľ		
Sheldon's Folly	NE	64			🗓						
	1.,5	0-1									
FAIRFIELD		20.4				Ì					
Fairfield Union Land Laboratory	NE	134	•	•	•		•	•		•	
Geneva Hills Cols. Presby. Center Greenfield Dam and Wildlife Area	SC	250	•	•	•	•	•	•	•	•	•
Lancaster H.S. Land Laboratory	NE NE	46			i		•		[
Rising Park and Mount Pleasant	NE	9 75		•		.		_ 1			
Rock Mill Dam Wildlife Area	NE	83	•	·	_ `]	-		•	- 1		
Tarlton Cross Mound	NE	16		•		•	•				
FAYETTE							ŀ				İ
Camp Gipiwa	NE	37	•	•	•	ł	•	•	1	•	•
Camp Pine	NE	17		•	•	•]	•	•	}		•
FRANKLIN							ŀ		ł]
Boyer Park	NE	9			İ		•	•			
Brookside Land Laboratory	NE	3				ŀ	•	1	ł		
Camp Gan Mahtor	NE	28 -	•	•	•	•	•	•		•	•
Camp Johnson	NE	87	•	•	•	- 1	•	•	l	. •	•
Camp Mary Orton	SC N	76	•	•	•	•	•	•	l	•	•
Camp St. Rita	NE	31	- 1	•	•		•	•	ł	•	•
Colonial Hills Land Laboratory Columbus City Parks	NE	8		J		-	•	J	1		ļ
Alum Creek Park	NE	100	l		_	_	_			İ	
Big Run Park	NE	102 277	i	•	•	•	:	j	- 1		i
Big Walnut Park	NE NE	77	.		[-	-	_			.
Cherry Bottom Park	Ü	94	-	-	•	- 1	-	-]	٠	•
Franklin Park	NE	100	• -		. 1	.	. 1	. 1	J	-	
Glen Echo Park	NE	4	ė.					.			l
Griggs Reservoir	NE	558	•	•			•	.	·		•
Hoover Dam & Reservoir	NE	864	•	•	•	•	•	•	- 1		• [
Olentangy Parkway	U	500		l]	- 1	•	- 1		
O'Shaughnessy Reservoir	NE	1,129	•	•	•	•	• [• [· [- 1	



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ABBREVIATIONS: NE - Natural Environment SC - School Camping C - Conservation Education U - Undeveloped	Type of Area		Shelter	Drinking Water	Sanitary Fac.	Picnic Tables	Parking	Hiking Trails	Guide Service	Charge	Сатріпд
COUNTY	F	Acreage	ङ	Ā	Sa	i.i.	P	H	ල් .	5	ပိ
FRANKLIN (Continued)				Ţ-							
Three Rivers Park	Ū	390	l	1		ł					
Whetstone Park	NE	161	•	. •	•	•	. •	•			
Columbus Metropolitan Parks Blacklick Woods Met. Park	NE	633			١.					ļ	
Blendon Woods Met. Park	NE	577								! .	
Darby Creek Met. Park	NE	120	•	• .	•	•	•	•	•	,	
Sharon Woods Met. Park Willohaven	NE	760 2	•			•		•	. •	١.	
Flint Ravine	NE	40	ļ				-	•		-	
Grandview Hts. Outdoor Education Area	NE	10	•	•	•	• .	•	ĺ	İ	1	! !
Indian Run Ravine Land Lab Indian Village Camp	NE SC	9 8		١.		İ		•	ŀ	١.	١.١
Jewish Center Outdoor Area	NE	50			•					-	
Marble Cliff Quarry	NE	1,000		ŀ		[l		
Prairie Lincoln Land Laboratory St. Timothy Outdoor Education	NE NE	7 10					:	:			
Shawnee Branch - Marble Cliff Area Quarries	NE	200					•	-			
South Branch Hoover "Y" Park	SC	68	•	•	•	•	•	•		•	•
Worthington H.S. Land Laboratory Worthingway Land Laboratory	NE NE	15 8					:	•			
	1,12]		ļ. -			,] [
FULTON Camp Palmer	sc	142			_						
Fulton Pond Wildlife Area	NE	38		•	•	•		•		•	•
Harrison Lake State Park	NE	245	٠	•		•	•				
Maumee State Forest	NE	3,071			,		•	•			l i
GALLIA	1			:							
Camp Francis Asbury	SC	300	•	.•	•	•	•	•		•	•
Bob Evans Farms, Inc. Tycoon Lake Wildlife Area	C	1,100 684	•	•	•	•	•	•			
	NE	004								ŧ	1
GEAUGA	NE	40					ļ				
Aquilla Lake Wildlife Area Auburn Marsh Wildlife Area	NE NE	69 461		•	•	•					
Big Creek Park	NE	570	•	•	•	•	•	•	•		• [
Camp Ho Mita Koda	SC	85	•	•	•	•	•	•		•	•
East Branch Reservoir Geauga Lake	NE NE	420 276						•		•	•
Halle Park	NE	300		•	•	,	·	•	,		•
Hambden Orchard Wildlife Area	NE	841	j				• .	i			
Highbrook Lodge La Due Reservoir	SC NE	28 1,200		•	•					•	: 1
Punderson State Park	NE	728 ·	•	•	•	•	•	•	•		•
Red Raider Camps	SC	300	•	•	•		•	•	[•	•
Richard's Camp River Park	NE NE	50 50	- 1		: 1	:		•	ŀ	•	•
Rose Farm	C	900	•	•	•	•	•	•	l	•	• 1
Thompson Ledge Park	NE	31	•	•	•	•	•	•	l		
GREENE			ļ		İ				j		İ
Beaver Creek School Land Lab	NE	46			1	ايا	•		l	ļ	
Bergamo Conference Center Central State University	NE NE	265 68	•	•				.			1
Outdoor Education Area		44								- 1	
Dayton-Montgomery County Parks	,,,,,,	450		_ [_	.		- 1	
Huffman Reserve	NE	450	•	•	•	•	•	•			



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ABBREVIATIONS: NE - Natural Environment SC - School Camping C - Conservation Education U - Undeveloped	Type of Area		Shelter	Drinking Water	Sanitary Fac.	Pienie Tables	Parking	Hiking Trails	Guide Service	rge	Camping
COUNTY	Typ	Acreage	She	D. D. D.	San	Pica	Parl	Hiki	Guic	Charge	Cam
GREENE (Continued)		550							+	+-	
Sugarcreek Reserve Glen Helen Nature Preserve & Outdoor Education Area Greene County Fish & Game Farm Greene County Parks John Bryan State Park Spring Valley Wildlife Area GUERNSEY	NE SC C NE NE NE	130 64 990 841	•	•		•					•
National Fish Hatchery Rolling Hills Outdoor Education Area Salt Fork State Park HAMILTON	C NE NE	154 20,279				•		•			
City of Cincinnati Parks Ault Park Burnet Woods Caldwell Park Eden Park Hauck, Cornelius J., Botanic Garden	NE NE U NE	223 88 122 184 8 1,500						•	•		
Mt. Airy Forest Stanbery Park Hamilton County Parks Miami Whitewater Forest Sharon Woods Shawnee Lookout Winton Woods	NE NE NE U NE	78 1,955 740 1010 2,012 40	. •	•	•	•	•	•			•
Indian Hills Schools Outdoor Education Center Newtown Fish Farm Soil Conservation Farm	NE C C	18 100	•					•			
HANCOCK Camp Beery Van Buren State Park	NE NE	309 138		:	•		:	:		•	
HARDIN Matson Recreation Area HARRISON	NĒ	82	•		•	•		•			
Baker Ridge Area Camp Tippecanoe Clendening Lake Foster's Lake Harrison Reclamation Area Sally Buffalo Park Snow Bowl Ski Area	NE SC NE C NE NE	178 850 6,400 70 1,321 408 327	•	•				•		•	
Sunnydale Farms Tappan Lake HENRY Dry Creek Access	C NE	300 7,140		•	•	•	:	•			
Florida Access Maumee River Parkway	NE NE U	2 4 485					•				
HIGHLAND Barrett's Mill Fallsville Wildlife Area Fort Hill State Memorial	NE NE NE	80 1,211 1,197	•	•	•	•	•	•		•	



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ABBREVIATIONS:			1	Water							
NE - Natural Environment	텼		İ	ू सं	ن	ဖွာ		<u>v</u>	95	i	
SC - School Camping	Area			≥	Œ	출		.is	Ξ		
C - Conservation Education	1 =		ا ر	<u> </u>	5	E 5	ъc	₽	Š	۵,	ρt
U - Undeveloped	0		Ē	· <u>\sq</u>	를	. <u>2</u>	.5	울	به	36	·Ē
<u> </u>	Type of		Shelter	Drinking	Sanitary Fac.	Picnic Tables	Parking	Hiking Trails	Guide Service	Charge	Сатріпд
COUNTY	E	Acreage	S	а	တိ	Pi	Ģ,	五	Ō	ರ	ü
HIGHLAND (Continued)											
Oldaker Wildlife Area	NE	139		Ì			•	1			
Rocky Fork State Park	NE	3,474	ł		•	•				1	•
Seven Caves	NE	100			. •	•.			}		
HOCKING	1		-								
Camp Akita	sc	970	· .					١.		١.	
Camp Beckoning Trails	NE	100	1	[•		:	ļ		
Camp Echo Hills	NE	500	l							•	-
Camp Greenhills	NE	1,200	١.	•	.		[ı •	
Camp Klages	NE	16	•	•			[1]] [
Camp Otterbein	SC	383					:		1		
Camp Otter beni Camp Oty'Okwa	sc	526		1 -	:	•		-		١.	
Camp Wyandot	SC	450	:	•	:	_	•	•			_
Hocking Hill Farm	NE	265] [•	-	•	•	•		•	[
Hocking State Parks and Forest	NE	10,000	•	•	•	•	•	•	ļ	}	•
Ash Cave	NE	10,000		_	_		•	۱.	[
Cantwell Cliffs	NE	60			:			[
Cedar Falls	NE	40			,.				2	i	
Conkle's Hollow	NE	120			,,,						
Old Man's Cave	NE	150	İ	[:			
Rock House	NE	160	ŀ	[-
Holiday Haven	NE	480	•]							
Lake Logan State Park	NE	715						_		ľ	1
Rock Bridge	NE	40	İ	-	- ·						
	1										ľ
HOLMES	_			1			١.				
Cherry Ridge Farm	C	135	'	•	•		•				
Spring Walk Farm	C	283		•	•		•				
Troyer's Hollow	NE	60	•	•	•	•	•	•			•
Whispering Hills	NE	250	•	•	•	•	٠	•			•
HURON									!		
Bellevue Reservoir #4	NE	8		•			•				
Camp Conger	SC	30	•	•	•	• :	•	•		•	•
Camp Singing River	NE	93	•	•	•	•	•	•		•	. •
Camp Todimeca	NE	297	•	•	•		•	•			•
French Property	NE	230				l	•	•			
Valley Beach Park	NE	30 .	•	•	•	•	•	•			•
Willard Marsh Wildlife Area	NE	1,676					•				,
JACKSON	l										ļ
Buckeye Furnace	NE	270				1	ļ				1
Camp Canter's Cave	SC	59	•			. !		• 1		· .	. i
Cooper Hollow Wildlife Area	NE	4,140	· .			j	.	ļ			ļ
Leo Petroglyph State Memorial	NE	12				•	•	.			ĺ
Liberty Wildlife Area	NE	145					1	Į			Ì
Richland Furnace Forest	บั	2,343				l	•	1			ł
] _							-			ŀ
JEFFERSON Austin Lake	NE	1,700		_ [_	_ [ŀ			_ [
Brush Creek Wildlife Area	NE	2,550	•	•	•]	-		ايا		•	•
Friendship Park	C	2,550 1,150		•		•	•	•	I		l
G. K. L. Wildlife Club Area	NE	500		ايا		.	. [. 1		- 1	
Jefferson Lake State Park	NE	933		- [-				İ	٠.١
VOINCESON DAKE DUALE 1 ALK	```	<i>3</i> 00	, -	٠	•	Ĭ	Ĭ	۱ .	ł		
KNOX							l	ŀ			
Brinkhaven Access	NE	. 36	. 1		j	.	•	į	ļ		ŀ
Camp Anderson	NE	205	•	•	•	•	•	•		•	•
Camp Nelson Dodd	SC	750	l	•			•				•



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ABBREVIATIONS: NE - Natural Environment SC - School Camping C - Conservation Education U - Undeveloped	Type of Area		Shelter	Drinking Water	Sanitary Fac.	Picnic Tables	Parking	Hiking Trails	Guide Service	Charge	Camping
COUNTY	Ę	Acreage	S	Ω	Sa	Ğ	Pa		3	ට්	ပိဳ
KNOX (Continued)											
Danville Conservation Farm Educational Park Extension Knox Lake Wildlife Area	C NE NE	280 63 760						•			•
Camp Cedar Hills Camp Lejnar Camp Roosevelt Camp Ruth Weigand Headlands Beach State Park Holden Arboretum Lake County Metropolitan Parks Chapin Park and State Forest Helen Hazel Wyman Park Hell's Hollow Park Hidden Valley Park Hidden Valley Park Indian Point Park Riverview Park Wickliffe H. S. Land Laboratory	NENGER REFERENCE	160 432 60 295 120 2,100 362 48 560 113 172 116 28 90	•								
Willoughby-Eastlake Land Lab	NE	30				Ì	•]]
LAWRENCE Dean State Forest Kitt's Hill Lake Vesuvius Recreation Area Wiseman-Clark Woods	NE NE NE NE	1,797 55 1,000 260		•	•	•	•	•		•	•
LICKING Buckeye Lake State Park Camp Agape Camp Falling Rock Camp Ohio Camp Wakatomika Dawes Arboretum Flint Ridge State Memorial National Fish Hatchery Octagon Earthworks and Mound Builders Earthworks Watkins Memorial School Land Laboratory	NE SC NE SC NE NE C NE	3,323 40 500 200 256 600 515 217 66						•	•	•	•
_	INE	οU	•	•	•	•	•	•	ļ		į
LOGAN Camp Alfred L. Willson Indian Lake State Park Kirkmont Center Marmon Valley Farm Rollicking Hills Valley High Ski Area Zane Caverns	SC NE SC SC SC NE NE	600 6,427 353 75 160 350 87	•	•		•	•			•	
LORAIN									-		- 1
Camp Iss-See-Kes Clare-Mar Camp Findley State Park Firelands Reservation Lorain County Metropolitan Parks	SC NE NE NE	40 152 917 300									
Carlisle Reservation Charlemont Reservation Mill Hollow-Bacon Woods	NE U NE	572 452 217	•	•	•						•



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ABBREVIATIONS: NE - Natural Environment SC - School Camping C - Conservation Education U - Undeveloped COUNTY	Type of Area	Acreage	Shelter	Drinking Water	Sanitary Fac.	Picnic Tables	Parking	Hiking Trails	Guide Service	Charge	Camping
LORAIN (Continued)		1						ļ			
Wellington Reservoirs Wellington Wildlife Area	NE NE							•			
LUCAS Crane Creek State Park Crosby, George P., Park & Gardens Maumee Valley Day School Outdoor Laboratory	NE NE NE	28	•	•	2		•	•	•		
Medusa Portland Cement Co. Quarry Metzger Marsh Wildlife Area Ottawa Park Toledo Metropolitan Parks	NE NE NE	300				•	•	•			
Canal Lands Met. Park Farnsworth Met. Park Oak Openings Met. Park Pearson Met. Park Providence Met. Park Secor Park & Arboretum Side Cut Met. Park Swan Creek Met. Park	NE NE SC NE NE NE U	140 40 3,200 320 300 500 90 410	•				•	•			•
MADISON Camp Madison Lake Madison Lake State Park Pine Tree Trail Procter Conference Center	NE NE NE SC	1-1/2 180 40 23	•	•	•	•	•	•		•	•
MAHONING Berlin Reservoir Wildlife Area Camp Lexington and Christ Mission Camp Holy Family School Land Lab Mill Creek Park Millwood Camp	NE SC NE NE NE	6,763 170 7 2,389 60	•	•	•	•	•		•	•	•
MARION Big Island Wildlife Area Owens Boy Scout Camp	NE NE	1.043 55	•	•	•					-	•
MEDINA Camp Crag Chippewa Lake Park Hinckley Reservation Maple Lakes Spencer Lake Wildlife Area Wildwood Lakes	SC NE NE NE NE	67 486 1,890 120 595	•	•	•	•			•	•	•
MEIGS Buffington Island Park Camp Kiashuta Forked Run State Park Shade River State Forest Hidden Lakes Royal Oak Park Southeast Branch, Ohio Agriculture R. & D. Center	NE SC NE U NE NE C	5 125 794 2,409 70 130 330	•	•	•			•		•	•
MERCER Grand Lake St. Marys St. Park Mercer County Waterfowl Refuge	NE NE	13,995 1,000	•	•	•	6 1			•		



<u> </u>											
ABBREVIATIONS:				er							
NE - Natural Environment	Area			Drinking Water	Sanitary Fac.	es		2	Suide Service	1	1
SC - School Camping	4	i		br	124	ab.		1 5	100		
C - Conservation Education	jo		er	l .E	l E		E E) pc	ű	ည့	Ē
U - Undeveloped	De C		Shelter	<u>;</u>	i.	Picnic Tables	꾿	Hiking Trails	ide	arg	Camping
COUNTY	Type of	Acreage *	S S	امّا	Sag	蓝	Parking		ਤ	Charge	Ca
MIAMI		1	 	+		+	 - -	 		+	
Camp Indian Hills	sc	52									
Piqua Historical Area	N			•	•			•			
Varinan	ł								İ	j	
MONROE			·	1		1	}	İ			J
Monroe Lake Wildlife Area Sunfish Creek Forest	NI U			•	•	•	•	•	Ì		
Sumsi Oreek Polest	10	900	'	İ	1	İ	,	ĺ	}		li
MONTGOMERY						1	ļ	}			1
Aullwood Audubon Center	. NĒ	70	1								1
Aullwood Audubon Farm	C	120			•						
Cox, James M. Jr., Arboretum	NE	164									1.
Dayton-Montgomery Park District					1			1			
Dry Lick Run Reserve	NE		[•	•	•	•	•			•
Englewood Reserve Germantown Reserve	NE		•	•	•	•	•	•		1	
Possum Creek Reserve	NE NE		•	*	*	•	*	•	•	•	• 1
Taylorsville Reserve	NE		_			:		1:	_]] ,
Jotter, E.V. Land Laboratory	NE		•			•		:	•		
Northmont Local Land Lab	NE		* ,	•	•				1	}	
Washington Township Park Dist.	"				1		1	`	ľ		
Concept Park	NE							l			
Donneybrook Park	NE		ĺ		l	1					i
Grant Park	NE			•			•	•	•	*	
Grant Life Science Center	SC			•	l		•	•			•
Old Lane Park	NE										
Yankee Park	NE	18		•			•	•			
MORGAN		1				ĺ	•				
Burr Oak State Park	NE	2,899									
Camp Douda Dale	NE	500		•		1				•	•
Muskingum River Parkway State Park	NE			•	•	•	•				ļ
Ohio Power Recreation Area	NE	100,000		٠	•	•	•	ø	•		• 1
(Cumberland Mine Area)	C	0.400							l		
Wolf Creek Wildlife Area	NE	3,600		•	ĺ		•	,			
MORROW	} .				•					I	τ [
Camp Broad Acres	NE	650		•	•					• 1	.
Dogwood Valley Camp	NE		•	•.	•		•			•	_• <u> </u>
Lutheran Memorial Bible Camp	SC	114		•	•	•	•	•	J	·	•
Mt. Gilead State Park	NE	172	•	•	•	•	•	•	j	}	•
MUSKINGUM		1]								J
Baughman Park	NE	65	İ		_	'.	,				ļ
Blue Rock State Park and Forest	NE						-	.	1	•	. 1
Dillon State Park	NE	6,675			•		· []				.
Donahoe Tree Farm	C	155	•	•		•	•	•	- 1		1
Muskingum River Parkway State Park	NE	116	Į			•	•	.	1		1
Ohio Power Recreation Area	NE	100,000	•	•	•	•	•	•	•		•
(Cumberland Mine Area)	C			İ			- 1	ļ	İ		
Powelson Wildlife Area Wildwood	NE	2,696				.	•		- 1	_ 1	
Zanesville State Nursery	NE C	200 206	}	•	٠	•	•	•		•	•
Zane Trace School Forest	NE NE	206 48		1		_		_		- 1	ł
NOBLE	145] 40	. }	}	•	•	. •	·		.	1
Eastern Ohio Resource Development Center	c	1,325		ا ۽ ا		.		.			ī [
Ohio Power Recreation Area	Č	100,000	. [.	.		j		.
Seneca Lake	NE	7,160	•		•	•	•	•			
Wolf Run State Park	NE	1,183	•	•		•	• ;	•			•
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ABBREVIATIONS:		1		er		1					
NE · Natural Environment	Area	1	1	Water	Fac.	ess		8	Guide Service		1
SC - School Camping	\ \	i		=	E.	Tables	ł	ig.	\ \bar{2}		}
C - Conservation Education	1 5		L .	l g	5	E	PC		Se	1	ξc
U - Undeveloped	e		≗	- Ki	ita	je.] 💆	, E	့်ခ	E	喜
	Type of	A	Shelter	Drinking	Sanitary	Picnic '	Parking	Hiking Trails	u.	Charge	Camping
COUNTY		Acreage	S	А	. 00	<u> </u>	4	I	9	5	Ü
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Camp Plymouth Shore	NE	5	•	•	•	•	9	ł		İ	•
Camp Sabroske	SC	110	•	•	•.	•		•	1		•
Camp Yukita	NE	35	•	•	•	•	•	•		l	•
Catawba State Park	NE	8	•	•	•	•	•	l			l
Cook's Woods	NE	30	1 .	ļ			1	•	i	ļ	
Crane Creek Wildlife Experiment Station	NE	2,600			1	1	•	•			1
Crystal Cave	NE	1 1	1	1			•	i	}	•	1
East Harbor State Park	NE SC	1,613	•	•	•	•	•	•	i	1	•
Lakeside	NE NE	10	•	١.	•		•	٠.	1		
Little Portage Wildlife Area Ottawa National Wildlife Refuge	NE	357	1	•	•	1	•]	1	ļ	1
Perry's Cave		4,800		•	1 •		•	•	l		
South Bass Island State Park	NE NE	10 32		_	1 .	1 _		l	Ι΄.	•	
Stone Laboratory	NE NE	10	•	•	•	•	•		l	ł	•
Toussaint Wildlife Area	NE	236	1		1 .		١.	[[
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Paulding Ponds	NE	51	1			-					
- Landing world	1		i	l .			, ·				1
PERRY	1			l			ľ				
Clouse Lake Wildlife Area	NE	93									
Royma Acres	C	1,000	}								
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PICKAWAY	1					1				i	
Circleville Canal	NE	35			}	ł	•	'			
Deer Creek State Park	NE	9,277			1	•	•				
Marion, A. W., State Park	NE	412		٠	•	•	•	•			•
Teays Valley Ranch Camp	SC	60	•	•	•	•	•	•			•
PIKE											
Cave Lake Park	NE	000			1	i		.		' I	
Kincaid Fish Farm	C	200	•	•	•	•	•	. •			•]
Lake White State Park	NE	33 360	_	•	•			ł			1
McAllister Angus Farm	C	150	•	•		•	•	_			٠,۱
Overlook Hills Farm	C	650	_ [•	•	•		•			ı
Pike State Park and Forest	NE	11,086	•	•	•		• !	•			
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PORTAGE	1 1		- [l
Camp Asbury	sc	305		•			•	. 1		ŀ	
Camp Carl	SC	240	.	•	•		.	•	ī		. 1
Camp Hi	SC	53	•	•				•		_	. 1
Centerville Mills YMCA Camp	sc	300	•	•	•	•	• [1		-
Lake Rockwell	U	800	ł					. •			j
Mogadore Reservoir	NE	1,015		•	•		•	•	.]	Į	.
Nelson-Kennedy Ledges State Park	NE	167	ĺ	•	•	•	•	•			ł
West Branch State Park	NE	6,447	•	- e	•	•	•	•		-	•
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PREBLE	100			- 1		į					j
Camp Myron Kahn	SC	86	•	•	. •	•	.•	•			
Fort St. Clair State Memorial Imes Park	NE	89	•	•	•	•	•	•	ŀ	- 1	1
Rush Run Wildlife Area	NE	. 78	ł	•	•	•	•	•	1	[•
Woodland Trails Scout Reservation	NE	1,183	· _ [•]	•	Į	. •	•	1		· [
moodand Figur Debut Deservation	NE	2,000	•	•	•	•	• .	•	- 1	1	•
PUTNAM			- 1	.			. [[
Kalida Fish & Game Farm	c	40		.	. 1			1.	.]	.]	
Leipsic Hunting & Fishing Area	NE	40		.						1	- 1
Leipsic Reservoir	NE	40	.	- I	-				- 1	- 1	
		40				-	-	-			

ABBREVIATIONS:			T		ь		Γ.	1	Т		_		
NE - Natural Environment	8	1	1		Water	ا ا تا	S		, s	;	g l		
SC - School Camping	A A			J		Fac.	<u> </u>		a:	1	3	- 1	
C - Conservation Education U - Undeveloped	-			<u>.</u>	ī.	Ţ.	E C	5.0	=	1 3	i g		£¢.
U - Undeveloped	Type of Area	: 1	j	le l	nki	ita	ne.	kin	20	1 2	2	5c	.틆
COUNTY	1	Acreage	.	Shelter	Drinking	Sanitary	Picnic Tables	Parking	Hiking Trails	Someting Sometimes		Charge	Camping
PUTNAM (Continued) Ottoville Quarries			\dashv			-		 -	-	╁╌		-	_
octovnie Quarries	NI	E 6	- 1						}]		1	
RICHLAND				.				1	1			.	
Camp Avery Hand	sc	217			-	_	_					1	
Camp Mowana	NE		-				•		•			. }	•
Camp Templed Hills	SC			•			•			'	1.		•
Clear Fork Reservoir Hidden Hollow Camp	NE	2,000		•	•	•	•			1 -	- [•
Kingwood Center	SC	.492	- }	•	•	• [•	'			:
Louis Bromfield Malabar Farm	C	47	,	-	•	•			•	,		.	
Mansfield Sewage Plant	C	715	- [- 1	•	•	•	٠	•	j	- [,	
Mansfield Weather Station	ľč	30	ł		j	•]		•	ļ	l	- 1		
Pine Valley Zoo	NE	$\frac{1}{2}$				•		•		İ	1	- 1	
Richland Rural Life Center	sc	80	. [•	•		•		1	- -	•	
Shelby Municipal Water Works	Č	3	1	•	•	•	•	•	٠	ļ	۱ ۱	•	•
Wooster Presbytery Camp	SC	270	- [.		_	1			
ROSS	ĺ		-				1	Ī	•		'	• 1	٠
Adena State Memorial	NIE	000	1			- 1	1	l				1	ı
Camp Valley Vista	NE SC	300		1.		•	- 1	•	. 1		-		
Chillicothe Schools Land Laboratory	NE	22 24	-		•	•		•	•		ŀ	- -	.
Daughters Conservation and Wildlife Area	NE	87		- 1				•	ļ				
IMound City Group National Monument	NE	68	- 1		•	_	•	•	ł		- -	•	•
Pleasant Valley Wildlife Area	NE	1.414	1		•	•	•	•	•		.		- 1
Ross Lake Wildlife Area	NE	1,110	- 1		•	.		•	- 1			1	J
Scioto Trail State Park and Forest Tar Hollow State Park & Forest	NE	9,399		,	•		.		.			1.	
Tal Honow State Park & Porest	NE	16,126	•	.	•	•	•	•					.
SANDUSKY	1	_				İ	l	ł	- 1			"	
Aldrich Pond Wildlife Area	NE	40	1	İ	l			.	Í			j	- 1
Green Springs Nursery	C	120		- 1			- 1.	•			1		- 1
Hayes State Memorial	NE	25			.	.			- 1		İ	1	
Miller Blue Hole	NE	13	1	ł	}		- 1					1	
SCIOTO			1	-	-				- 1		1		- [
Camp Molly Lauman	NE	100				.	.	_				1.	-
Mead Experimental Forest	NE	700		1					•		1	•	1
Millar Christmas Tree Farm Portsmouth State Park	C	160	1	- [- 1	_	• .	.			1	1	
Shawnee State Forest	NE	350	•	- I	.	•	•	•	•		}	1 .	
	NE	57,819	-	1	- .		- 1	•	•				1
SENECA	1 1		ł	1			1					ł	ì
Camp Hertzer	NE	43		.		.	- 1				l ·	1	
Camp Pittenger Camp Seneca	NE	30		•	- ;	,	.				1	•	1
Camp Seneca Knoblaugh Farm	NE	215	1			, ,	.	•				:	1
Pleasant Valley Girl Scout Camp	C	5	•	•	1	, ,	•	•	-			•	1
Seneca Caverns	SC	98]		•	· ·	•	•					1
	NE	. 2		1.	· •	' '	'	•	1	ł	•	1	1
SHELBY			1	1	.]	*	- 1		1			1	
Lake Loramie State Park	NE	1,950		1 -	1.	1.		_		ŀ			
Leighty Lake	NE	12	•		"	'				.		•	
Lockington Locks	NE	45			1				.	-		1	1
Sidney Schools Outdoor Education Area	NE	13		1					.	1		;	1
STARK				1	1] -		.]			1
Bolívar Reservoir	NE	-880			.1	1	ĺ			-			
		NMI I					1 .		- 1				
Camp Wanake	SC	200		•	•	•	. '	'	- 1				1

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ABBREVIATIONS:	•			er							
NE - Natural Environment	l ea			Vat	ູ່ຍ	es		S	ice	1	1
SC - School Camping C - Conservation Education	¥		Î	00	£.	ap	İ	L E	2.	1	١
U - Undeveloped	9	1	l e	E.	lar,	c T	iğ.		Š	g.	ğ
COUNTY	Type of Area	Acreage	Shelter	Drinking Water	Sanitary Fac.	Picnić Tables	Parking	Hiking Trails	Guide Service	Charge	Camping
STARK (Continued)				+=-	94	 		 		10	0
Canton Park System	Ì		1		-	·		<u> </u>			
Monument Park	NE	16	ĺ	١.		١.					}
Mother Gooseland Children's Park	NE	4		:		•	:				1 1
Nimilia Park	NE	23	•		· •	•					l i
Stadium Park Lake Park Wildlife Area	NE	88	•	•	•	•	•	•	•	İ	1 1
Marlington School Land Laboratory	NE	93	1	•	٠	•	•]]		ĺ	•
Stark Wilderness Center	NE NE	20 409	- I	_			•	•			1 1
SUMMIT	1,12	400	•	•	•	•	•	•			
Adell Durban Park and Arboretum	NE	36									
Akron Fish Farm	C	26	•	•	•	*	•				
Akron Metropolitan Parks	1.					,	•]	•			
Deep Lock Quarry Met. Park	NE	191					•			-	
Firestone Met. Park Furnace Run Met. Park	NE	250	•	•	•	•	•	•			
Goodyear Heights Met. Park	NE	885] •	•	•	•]	•	•			l f
Gorge Met. Park	NE NE	372 250	•	•	•	•	•	•			i i
Hampton Hills Met. Park	U	250 278	1 • [•	•	•	•	•]
O'Neil Woods Met. Park	Ŭ	240	1 1		•	İ]		
Sand Run Met. Park	NE	987	•	•	.				[
Seiberling, F.A. Nature Center Silver Creek Met. Park	NE		1 1	ĺ	•	- 1	•	•]			
Virginia Kendall Met. Park	U NE	477	1 1	i			•]	•			1
Brandywine Ski & Recreation Center	NE	1,575 240	•	•	• 1	•	•	•	-		Ī
Camp Julia Crowell	SC	240 235		•		•	.		•	.	1
Camp Margaret Bates	sč	125							ł	*	• : 1
CYO Camp Christopher	sc	160	•	•	•		•	•	1		. 1
Nimisila Reservoir Portage Lakes State Park	NE	1,225.	1 1	•	•	ı	•				
Revere School Land Laboratory	NE	2,438	•	•	•	• [•			. [- 1
Tamsin Park	NE NE	6 100		•	_		•	•	ĺ		1
Twinsburg Land Laboratory	NE	17	•	•	•	: 1	•	•	- 1	- 1	•
TRUMBULL		* '		1	·	•	ĺ		ľ	- 1	- 1
Anderson Park	NE	10.					.]	i	İ		ŀ
Camp Sugarbush	SC	190	. •	•	. •	•		•		-	.
Grand River Wildlife Area	NE	5,187		•			•	•		- [j
Mosquito Creek Reservoir Wildlife Area Mosquito State Park	NE NE	11,857]]	•			•				•
Warren School Land Laboratory	NE	/ 11,857 78	[•	•	•	•	.		- 1	•
TUSCARAWAS	' '	10		1			-				
Beach City Reservoir	NE	1,350		.	. 1				-	.	1
Camp Zimmerman	SC	300	•	•	•	•		•			.
Devil's Den Park Dover Reservoir	NE	275	•	•	•	•	•	•	.	.	
Fort Laurens State Memorial	NE	490		•	•		•				
Schoenbrunn Village	NE NE	81 171	:	•	•	٥	•				
Snyder Conservation Farm	C	367	•		•	•	:		-		
Watkins Farm	č	50		-	- 1			1		ı	
Zoar Lake Wildlife Area	C.	43					•				
UNION											·,] ·
Camp Radawood Hall Park	NE	15		•	•		•	•		1	•
Richwood Lake Park	NE NE	7 25	•	•	•	•	•	1	1		
	1/15	20	•	• .	•	• -	•	•			
VAN WERT Hiestand Woods Park	NIE	00									
	NE	20	•	•	• 1	• .	<u>• </u>	•			



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ABBREVIATIONS: NE - Natural Environment SC - School Camping C - Conservation Education U - Undeveloped COUNTY	Type of Area	Acreage	Shelter	Drinking Water	Sanitary Fac.	Picnic Tables	Parking	Hiking Trails	Guide Service	Charge	Camping
VAN WERT (Continued)			-						•		
Jubilee Park	NE.	6	•	•	•	•	•			1	
VINTON			}	•							
Community Camp	NE	1.200						•			•
Lake Alma State Park	NE	231	. •	•	•	•	•			. ,	•
Lake Hope State Park and	NE	22,552	•	•	•	•	•	•			•
Zaleski State Forest Vinton County Episcopal Camp	NE	500								•	
Vinton Furnace Experimental Forest	NE	1,200			•		•			ŀ	
Wildcat Hollow	NE	750		•	•	•	•	•			•
WARREN											
Bart's Wildlife Recreation Area	NE	19	•	•	•		•	•		;	•
Camp Graham	SC	70	•	•	•	•	•	• 1			•
Camp Kern Camp Swoneky	SC SC	410 150				•	:				
Camp Wy-Ca-Key	SC	125	•	•	•	•	•	•			•
Fort Ancient State Memorial	ΝĒ	696	•	•	•	•	•				
Hob Nature Center Miami Canoe Base	NE NE	110 111	١.	_ ,		•	:	•			
	NE	111	•	•	•		*				•
WASHINGTON	00	. no			_						
Camp Hervida Fall Run Girl Scout Camp	SC NE	86 205	•		•	•	•	•			•
Muskingum River Parkway	NĒ	116		•	•	•	•	l.			
Saida	NE	375		•	•	•	•	•			
Veto Lake Wildlife Area	NE NE	448		•	•	•	•	,			
Warren High School Land Laboratory	INE	10									
WAYNE	c	1/10	_								
Davey Tree Nursery Lazy J Park Ranch	NE	160 155							٠		
Memorial Forest	NE	124			•	•		•	l		
Millbrook Mill	NE	1	ĺ				•				
Myers-Swinehart Farm	C	218					•				
Ohio Agricultural Research and Development Center	Č	1,953		•	•	•	•			*	'
Secrest Arboretum	NE	115		•	•	•	•	•			
Shreve Lake Wildlife Area	NE	170			•	•	•				
Wayne County Saddle Club Weygandt Woods	NE NĒ	50	•	•	•	•	•	•			
,	ME	44		,			•				
WILLIAMS	NE	150					_				
Beaver Creek Wildlife Area George Bible Park	NE U	153 60					•				
Hickory Valley Camp	NE	40		•	•	•	•	•	i		
Lake La-Su-An	NE	500	•		•	•	•	•			
Williams County Conservation Area	NE	74	•	•	•	• ,	•	•			ı
WOOD											
Bowling Green School Land Laboratory	NE	2					•				
Lakota School Land Laboratory	NE	1/2		•	•	_ [•			. [
Mary Jane Thurston State Park Rock Circus	NE NE	66 200	•				.,				
argeis en eus		200									
WYANDOT	375	4.6	·		5. 1				·		
Bud Lake Camp Trinity	NE SC	10 8	· .	•	.				١.		.
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ABBREVIATIONS:]									
NE - Natural Environment SC - School Camping C - Conservation Education U - Undeveloped COUNTY	Type of Area	Acreage	Shelter	Drinking Water	Sanitary Fac.	Picnic Tables	Parking	Hiking Trails	Guide Service	Charge	Сатріпд
WYANDOT (Continued) Indian Mill State Memorial Killdeer Plains Wildlife Area Wyandot Wildlife Area	NE NE NE	2 8,100 341		•	•	•	•				
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